California GARDEN

SINCE 1909 OCTOBER-NOVEMBER, 1965 VOL. 56, NO. 5

Photo by Mackintosh

A CALL FOR STREET TREES IN SAN DIEGO — by Roland Hoyt

ORCHID PEST CONTROL • BEGONIAS FOR PATIOS
UPRIGHT GARDENING • CALENDAR OF CARE

35 CENTS

FLORAL EVENTS

OCTOBER-NOVEMBER, 1965

SAN DIEGO FLORAL ASSOCIATION PROGRAMS

Third Tuesday, 8 p.m. Floral Building, Balboa Park
Chairman — Mrs. Edward Penprase

Regular Meeting, October 19, 8 p.m.

Ed Ogden will speak on "Down to earth gardening with new ideas." Many readers turn first to Ed Ogden's column which always begins the monthly garden care section of CALIFORNIA GARDEN. Now you can thank him for his tips and ask him for more when you meet him in person at this meeting. Be sure to come early for a good seat, and bring your neighbor who isn't getting CALIFORNIA GARDEN yet.

Special Daytime Meeting, November 16, 1965, 1 p.m.

Marjorie Rankin, well-known Los Angeles flower arranger and lecturer, will discuss "Flower Arrangements for the Holidays." This meeting will be held in the Puppet Theatre, Balboa Park, after which members and guests will adjourn to the Floral Building for tea and an exhibit and sale of handicraft and holiday novelties by the Creative Arts Group. Because of the popularity of this meeting, Floral Association members are asked to present their membership cards. Guests are welcome for a nominal fee.

FLOWER ARRANGEMENT CLASSES AT THE FLORAL BUILDING, BALBOA PARK

For information, call Mrs. Roland Hoyt, Chairman, 296-2757

1. **Creative Arts Group** 10 a.m.-2 p.m. Second and Fourth Wednesdays
2. **Flower Arrangement Demonstration Class,** 9:30 a.m.

Classes start last Monday in October
Instructor: Mrs. J. R. Kirkpatrick

FLORAL EVENTS

OCTOBER

30-31	IKEBANA EXHIBIT Theme: "Odes to October" Sat., 1-5; Sun., 10-5	FLORAL BUILDING, Balboa Park Flower Arrangers' Guild of San Diego
8-10	FLOWER SHOW, ARBORETUM DISTRICT Theme: "El Conquista Dorado"	L.A. STATE & COUNTY ARBORETUM 301 N. Baldwin, Arcadia
30	FALL FLOWER SHOW	L.A. STATE & COUNTY ARBORETUM 301 N. Baldwin, Arcadia
28	FLOWER ARRANGEMENT SHOW and TEA	COLONIAL HOUSE 4810 Whitsett, N. Hollywood Floral Designers' Club, Inc.

NOVEMBER

21	REBLOOMING IRIS SHOW First Annual	FLORAL BUILDING, Balboa Park S.D., Imperial Co. Iris Society
1	Third CULTURAL SYMPOSIUM Theme: "Think Beauty, Create Beauty, Enjoy Beauty" Mon., 9-3	L.A. GARDEN CLUB & GREATER L.A. DISTRICT Ambassador Hotel, L.A.
19	CHRISTMAS SHOW AND TEA	L.A. GARDEN CLUB Plummer Park, L.A.
30	CHRISTMAS TEA	LAUREL GARDEN CLUB N. Hollywood Women's Club

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PUBLISHERS SINCE 1909
of
CALIFORNIA GARDEN MAGAZINE

Among Our Contributors

Betty Mackintosh, Staff Photographer for CALIFORNIA GARDEN, grew up in San Diego but has traveled extensively with her army husband. Besides her superb photos in this magazine, she has had full color pictures in *Desert Magazine,* whose Christmas cover will be her work. She showed two photos in the Southwestern International Salon of Photography at the San Diego Fair. She has helped the Natural History Museum with display photography. Many of their color transparencies of wild flowers are hers. She is photographing a series of flower pictures for the backs of playing cards.

Roland S. Hoyt, Fellow of the ASLA, is known for his definitive book on *Ornamental Plants for Subtropical Regions.* He has been the landscape architect for many major projects in San Diego over the years. His most recent concerns are the Salk Institute and the San Diego Civic Concourse. "Call for Street Trees," is very dear to Mr. Hoyt's heart. Therein he assays the reasons for a lack of trees in San Diego and proposes some cures, the main ones being Interest and Understanding.

Donovan Maley, Art Director of the *San Diego Magazine,* found time, in between whipping up an award-winning one-act play for the Globe Theatre Tournament and singing in Starlight Opera, to do some research on camellia history. While on a fellowship at Oxford he met his future bride and is now leaving for Saudi Arabia to fulfill a government teaching contract.

Clifford H. Pope, author of several nationally-known books on snakes, turns his inventive talents to devising aids to enable the "slowed-up" gardener to work a while longer. He and his wife live in Escondido where, he insists, she is the better gardener.

Alice M. Clark has had a special interest in begonias for many years. She was made an honorary member of the American Begonia Society in recognition of the series of begonia articles and drawings she made for their publication, *The Begonian.*

Burr Clouette is known for his interest in rare and unusual succulents and cacti, as well as iris and amaryllis. Much of his work has been experimental. He now lives in South Carolina where he has started an Amaryllis and Iris Nursery.

E. Robert Bichowsky is a graduate of UCLA, in Subtropical Horticulture. He is an instructor at Mesa Junior College where he is growing experimental plots of turfs and ground covers.

CALIFORNIA GARDEN

October -November, 1965

Vol. 56 No. 5

THE COVER

Podocarpus elongata. Description, page 15. *Photo by Betty Mackintosh*

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FASCINATING CAMELLIA HISTORY

by Donovan Maley

HOW MANY people realize when drinking a cup of tea that they are partaking of a close relative of the exotic evergreen flowering shrub, the Camellia: inspiration of poet, playwright, courtesan and the more common garden-variety green-thumber. The Camellia's fascinating history from ancient China and Japan to modern California is laced with intrigue and story-book lore. As early as 900 B.C. several varieties of Camellia Reticulata were fully hybridized and were cherished in ancient Chinese gardens. They were developed by religious orders whose objective was to produce exotic flowers for ceremonial use. They were thought to be of divine origin. The Japanese shared the Chinese enthusiasm for Camellias but for unknown reasons they concentrated on Sasanqua and Japonica species rather than the Reticulata. Numerous gardens in the vicinity of Kyoto feature Japonicas estimated to be more than four centuries old. Some have trunks over forty inches in diameter and grow 25 to 30 ft. in height and width. Although smaller, Japonicas are just as spectacular as Reticulatas and are just as deeply thought of for their religious significance. The ancient Japanese courtesan Liu Murasaki (no relation of Lady Murasaki of the *Tale of Genji*) was said to have worn nothing but four camellias on her presentation to the Emperor Chu Miu Kyakoi. Her cousin, the infamous traitor-spy-courtesan, Mita Harioni used a bouquet of the sacred Japonica variety to smuggle news of the emperor's untimely death to his most dreaded enemies, the Hitashi-Hijakaki. The glories of the Camellia have been artfully sung in many a Japanese silk printing.

The western world, or so evidence seems to imply, has known of the Camellia plant since at least 1550. Research provided in 1957 by Dr. Frederick G. Meyer, a horticultural specialist with the U. S. Department of Agriculture indicates records of Camellia bushes growing in the garden of an ancient castle in Oporto, Portugal. This seems reasonable because 1550 was the approximate date Portuguese traders made contact with Japan. The Camellia was among the first oriental imports to the west. For some reason it did not become a distributed garden plant until more than two centuries later in the eighteenth century. Story has it that the original importation of the plant from the orient was a device used by the Chinese and Japanese to preserve their monopoly on the tea industry. Misled western traders often took home Camellias in place of what they presumed to be the costly tea plant thus enabling the wiley orientals to continue control of the tea market.

After its introduction into the western world, the delicately beautiful (though hardy) flower became a prize of court-dandies and the fashion of the upper classes. Alexandre Dumas' widely celebrated **La Dame aux Camellias** which later became the play, **Camille,** set the mood and transformed the Camellia fashion into the Camellia rage. No person of breeding was fully dressed without his boutonniere. People wore Camellia wreathes, annointed themselves with Camellia oil and ate Camellia salads and candies. The fad reached ridiculous proportions when the frivolous Madame Berenice du Bois offered her hand to the suitor who could provide her with the most perfect example of a Camellia blossom. Four dandies died in a daring duel in the du Bois' dining room. The thrice-married Madame Bernice had all four stuffed with the petals of her precious flower and seventeen petal-scattering dwarfs attended the funeral assemblage.

Today the most a Camellia can hope for is to nestle on the bosom of a Queen but let us hope its rich adventurous history is not over. Perhaps . . . well, who knows?

Bibliography

The Camellia Book, Threlkeld. Van Nostrand, 1962

Camellias for Everyone, Chidamian. Doubleday, 1959

The Fabulous Camellia, Venable. Oxford Press, 1951

Camellia Lore, Hatchert. Macmillan, 1914

CALIFORNIA GARDEN GETS AROUND

CALIFORNIA GARDEN circulates its influence and information throughout the world to thousands of people.

Two Russian libraries find it valuable, as well as subscribers in England, Scotland, Israel, Jordan, Japan, India, New Zealand, Australia, West Germany, The Netherlands, Venezuela, Colombia and Brazil. In order to insure delivery to a subscriber in Brazil, the magazine was sent by registered airmail. The Philippines and the Fiji Islands receive it. Eighteen gift subscriptions from one local subscriber go mostly to friends in the Service overseas who were stationed here formerly.

Readers in twenty-five states of the United States from Alaska to Florida, from Hawaii to Maine send for it. Included are Arkansas, District of Columbia, Illinois, Iowa, Kansas, Nebraska, New Jersey, New York, Ohio, Oregon, Pennsylvania, Texas, Virginia, Washington, and West Virginia.

Subscribers in California outside San Diego County, include forty-eight Junior High School, College, and University libraries where thousands of students have access to it. The California Youth Authority orders three subscriptions for its use. The inmates of San Quentin are provided with it.

Several County garden clubs subscribe as a unit; Civic Center, Poway, San Dieguito, Green Thumb, Lakeside, Point Loma and the American Society of Landscape Architects.

All other copies go to local supporters of the oldest garden magazine in the United States which has been continuously published here since 1909.

GIVE CALIFORNIA GARDEN FOR CHRISTMAS

WHY not plan your Christmas shopping now! Give CALIFORNIA GARDEN for six Christmas gifts a year to those you love and admire the most. Sit down now and make your list of garden buffs or garden beginners.

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GARDEN TOURS FOR MEMBERS

SUNDAY — OCTOBER 24, 1965, 2-5 P.M.

Garden of Joe and Edna Lowry • 7425 Roosevelt Ave., Lemon Grove

Shade Garden under Saran cover. *(For description, see page 15 of this issue.)*

Host and Hostess; Mr. and Mrs. Chet Van Dusen.

Directions: Going East on University, turn right on Massachusetts, left on Central, right on Corona to Roosevelt — 7425 is the address.

Tours will be omitted during Winter months. Resume in March.

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STATEMENT REQUIRED BY THE ACT OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, JULY 2, 1946, AND JUNE 1, 1960 (74 stat 208) SHOWING THE OWNERSHIP, MANAGEMENT, AND CIRCULATION OF CALIFORNIA GARDEN, published bi-monthly at San Diego, California, for December 1964.

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3 The known bondholders, mortgagees, and other security holders owning or holding one per cent or more of total amount of bonds, mortgages, or other securities are: None

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5 The average number of copies of each issue of this publication sold or distributed through the mails or otherwise to paid subscribers during the 12 months preceding the date shown above was: (This information is required by the act of June 11, 1960, to be included in all statements, regardless of frequency of issue) 1100.

ROSALIE F. GARCIA
Office Manager

I certify that the statements made by me above are correct and complete.

CONTROL OF ORCHID PESTS

by Byron T. Geer

THOSE people who grow Orchids do so primarily for the reward of the flowers. This fact will be readily accepted by anyone. Anything therefore which interferes with the healthy normal growth of the plant or with the quality of the blossom produced, should be considered highly undesirable in a well run greenhouse. Some of the factors involved we cannot control. For instance, we cannot, except under certain circumstances, regulate the extent of the daylight hours. Other factors, such as the temperature range, the atmospheric humidity and the nourishment requirements of our plants, we control or regulate to the best of our ability; (always in an effort to improve the vigor and thus directly the quality and quantity of the bloom.)

My parents were the old-fashioned type who truly believed that an ounce of prevention was worth a pound of cure, and this concept was drilled into me at an early age. The virtues of cleanliness were stressed too, and I have found that nowhere have these lessons paid off more than in the control of pests and diseases in the garden and Orchid house. Sanitation is synonymous with prevention in these areas. Keeping pots, benches and glass clean and free of algae and molds is a nuisance, but these all present excellent breeding places for many of the common pests. Ground covers and landscape planting around the growing area are often a source of reinfestation. Are they necessary or could a better set-up be worked out? Do you pick up and dispose of dead leaves and other debris? Do you wash and sterilize pots and potting tools before use? Do your plants have adequate room for growth without being crowded too closely together? Do you isolate pest-infested or diseased plants to prevent possible contamination of healthy ones? Do you make positively sure that new plants brought in are free from pests or diseases before you put them with your others?

If your answers to all these questions are an unqualified "yes," you have already won half the battle with the predatory insect world, and you may have little need for chemical controls. Most of us, however, cannot afford to be so smug about our growing conditions since we find that, from time to time, some little beastie has gotten out of hand. We must head for the spray cabinet and go on the warpath. Whether or not we like the idea of chemical controls, they are there for our benefit and we would be foolish not to prosper by them. There is a bewildering array of materials spread out in any nursery, but a few well selected insecticides will do the whole job thoroughly and completely. It would be well, I think to discuss briefly what these few controls are, and how they should properly be used before we consider the insects to be destroyed by them. I would be remiss if, in advocating the use of these chemical killers, I did not emphasize the dangers inherent in their use. They are all poisons, as dangerous as any of the materials for which you have to sign a register at the corner drugstore. They must be handled with caution, but if proper precautions are taken, they may be used with little or no likelihood of injury to the user or to others. The label on the bottle will clearly spell out what you can and cannot do, and the one thing I would stress above all others — READ THE LABEL AND USE EXACTLY IN ACCORDANCE WITH DIRECTIONS. This applies particularly to the fine print usually marked 'Caution.' All the insecticides listed here can be used safely if used as directed.

CYGON — An organo-phosphorous systemic insecticide which is absorbed by the roots of the plant and fed back up through the sap. It kills by ingestion and is effective for Aphids, Scale, Thrip and Mealybug. The residual action as a spray is about two weeks; as a drench about three to four weeks.

MALATHION — An organo-phosphorous compound which, to be fully effective, must contact the insect to be killed. Its residual action both as a spray and as a drench is about one day. It has a strong unpleasant odor, but is the least toxic of the insecticides recommended. Effective against Scale, Thrip, Mealybug and Aphids.

DDT — A chlorinated hydrocarbon with three to four weeks residual action. Broad spectrum killer effectively against Scale, Thrip and Springtails, but has no effect on Mites. As a matter of fact, since it kills off the natural enemies of the mite group, its use frequently results in an explosive population expansion in the Mites.

CHLORDANE — A chlorinated hydrocarbon highly useful for the elimination of ants. Avoid for plant use, since many types of Orchids seem to be adversely affected.

DIAZINON — An organo-phosphorous broad spectrum killer. Residual action about ten to fourteen days, controls Mites, Ants, Thrip, Aphids, Scale and Mealybug.

KELTHANE — Best control for Mites.

With the exception of Cygon, all the materials listed above are available in wettable powder and/or liquid emulsion form. If liquid emulsion is used, it should not have an oil base since oil (or the more commonly used distillates) has a definite toxic effect on Orchid roots. Any of these products should be sprayed or dusted onto the plant thoroughly, covering both the upper and lower sides of the leaves, the pseudobulbs and the rhizomes. Measure or weigh them accurately using the amount prescribed by the manufacturer. Too little will probably not do the job; too much may cause injury to the plant. Spray at such a time that the foliage will be completely dry before temperature drop. Spray at regular intervals following the residual strength of the insecticide used until control of the particular pest is gained. Follow a program of light preventive spraying at least twice a year.

Orchids, given healthy environmental conditions, are remarkably tough and resistant to diseases and the depredations of insect pests, *but* we need to remember that the greenhouse, warm and humid, is an ideal propagating ground for insects, bacteria and fungi. It behooves us to

keep alert for signs of trouble. Early recognition of the symptoms of distress is doubly important because of the phenomenally rapid spread of many of the most troublesome of the unwelcome visitors. Generally speaking, you may be in trouble if you observe any of the following;

1. Aphids, mealybug, scale, snails, slugs, ants, thrips, weevils or any other insect.
2. Stunting or deformity in growth.
3. Yellowing or dying of entire or partial leaves.
4. Localized lesions — dead or dying tissue within the leaves.
5. Mottling or streaking in the color of the leaves.
6. Pitting or warting of leaf tissue.
7. Damp off of new growth.
8. Blossom drop prior to maturity.
9. Spotting of flowers.
10. Mottling in color of flowers.

To be sure, certain of these symptoms may be the result of cultural practices or the symptoms of disease rather than pests. Nevertheless, the cause *must* be sought out and corrected. Your plant is sick; there is a logical reason and it's up to you to play doctor. A discussion of the various diseases which plague Orchids, arising from bacterial, fungal or viral sources would take a separate article in itself. I would like, however, to cover briefly the insect and pest world and the best methods we have at hand to combat their ravages. We have said that Orchids are resistant to pests. This is surprising when we consider the vast number of pests to which they may be subjected.

Probably the most common annoyance in the greenhouse is the periodic flare-up of one or more forms of **Scale.** These fall into two groups, the soft scales and the armored scales, and there are a great many species within each group that infest Orchids. The female of the species is more or less flattened and may be circular, elliptical or pear shaped, from one twelfth to one eighth of an inch in length. Males are normally free moving and greyish white. A colony of males resembles a small wisp of cotton. There are types of scale however, in which the male is also shelled. From several dozen to several hundred eggs are laid beneath the shell of the female, or living young may be produced. The young are migratory and may choose to settle on any part of the plant. Leaves, sheaths, bulbs, rhizomes and roots are all nectar and manna. Once settled they immediately commence the program of feeding on the plant juices and breeding. In addition to the damage done by sucking of the plant sap, many species exude a honeydew which attracts other insects and/or develops mold. Malathion, DDT and Diazinon are effective in most cases, but these materials do not reach the eggs under the armored female, and the treatment must be repeated at weekly intervals until controlled. Cygon seems to produce excellent and longer lasting results.

Mealybug is another perennial pest and one that is relatively difficult to handle. About six species are known, and since they are quite cosmopolitan in their plant tastes, reinfestation is common. The adult mealybug is from one fifth to one third inches long, and is covered with a white or yellowish-gray waxy coating which is water resistant. Eggs are laid in a cottony coccoon and hatch in four to ten weeks. They, like the scales, feed on the juices of the plant and also secrete honeydew. Control is difficult because of the wax coating on their bodies which effectively sheds insecticidal sprays and because of the extended period in which eggs may be hatched. Diazinon and Malathion have proved reasonably sure, but a drench with Cygon at four week intervals will get the newly hatched young before they reach adult egg laying capacity.

Aphids, or plant lice, are a scourge to Orchidists again because of the rapidity with which they multiply. A single female produces 50 to 100 young females which mature and give out with new young within ten days. If you have a computer handy you may appreciate just how many billions of Aphids may take over your garden within a two month period. Plant lice feed on the buds and flowers of most of the Orchids and are commonly thought to be a chief cause of the spread of bacterial, fungal and viral diseases. Diazinon and Malathion limit their activity, but must be repeated at regular intervals. Cygon is recommended highly because of its longer lasting residual effect.

The **Spider Mite** is an active pest both inside the greenhouse and out. Mites feed particularly on the thin leaved varieties of Orchids such as Cymbidium and Lycaste. Because of their size (approximately 1/50th of an inch) they are not easy to detect, and heavy damage is usually done before the grower is even aware that a problem exists. Both the true and the false Spider Mites develop to egg-laying maturity within one week, and a mite colony normally triples its size within this time. A large number of species are known to infest Orchids, but the most common is the Two-spotted Mite. The simplest recognition of this pest is by the characteristic silver grey webbing on the underside of the leaves. The False Spider Mite, on the other hand, does not spin a web and its only trademark is the pitted and chewed leaf where it has fed. Constant vigilance is necessary to prevent reinfestation since the mites are partial to a great many host plants. Citrus, fuchsia, dichondra and certain grasses are favorite foods, so the presence of any of these plants near the Orchid growing area is an invitation to trouble. Kelthane, Diazinon and Malathion applied twice at seven to ten day intervals will provide complete control. A preventive spray every six weeks is good insurance.

The tiny, slender wingless beasts that make themselves at home in the potting compost and multiply to fantastic proportions are Collembola or **Springtails.** It was thought for many years that they fed only on decaying matter and did no actual harm to the Orchids. (A statement to this effect appears in the August issue of the American Orchid Society bulletin). There seems to be ample reason to believe, however, that they do feed on growing root tips. In any case, they contribute to the rapid breakdown of potting composts and should be eliminated. Either DDT or Chlordane will do the job quickly and efficiently.

One of the serious menaces to Orchids is the common garden **Thrip.** These are small winged creatures about 1/25th of an inch long, and they are very adept at hiding — moving so rapidly that seldom are they

actually seen. You may not even know that they have been around until blooming season when you find your flowers disfigured with small discolored spots where the Thrip have punctured and entered the bud. The best control measures seem to be Cygon, Diazinon and Malathion.

I was amused to note in a text published in 1950 that a prominent English writer states that Aphids, Mealybug and Mites are subject to pneumonia in which case they should seldom be a problem in the greenhouse. The same writer in the same book also suggests that we encourage garden snakes, frogs, toads and salamanders to keep down the insect population. Makes me wonder if things are done differently in England.

Two of the garden pests which are most unpleasant are actually the easiest to control. **Snails** and **slugs** seem to pop up from nowhere in an otherwise clean greenhouse, and there is no excuse whatsoever for putting up with them. Even the tiny bush snail can be eradicated completely by consistent use of Metaldehyde powders or dips. If the infestation is heavy, a 50% Metaldehyde dip is suggested. Do *not* use the standard garden baits containing arsenic on your Orchid plants. Arsenic is extremely toxic to Orchid roots, and your end results will be disastrous.

If your annoyance is **Ants,** invest in a box of 10% Chlordane powder and use it as necessary. That ants do any harm in themselves is questionable in my mind, but they most certainly do farm out other insects as food gatherers.

Some of the more common pests and most of the lesser known ones, such as the **Orchid Weevil,** you may never see in a lifetime of Orchid growing. Where they do make their appearance prompt action toward destruction is essential; but the hundreds of excellent chemical controls available in today's retail market do not mean that your plant medicine chest needs to be stocked as if it were the corner drugstore. The few basic insecticides listed will give you prompt and complete control of almost any insect that you are likely to encounter.

Go after your pests; eradicate them in your Orchid area since they are doing you no good and may be doing you a great deal of harm. Read your bottle labels, follow your manufacturer's directions, appreciate the fact that you are handling lethal material and be careful that in eliminating your pests you do not eliminate yourself in the bargain.

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A BOOK IN THE HAND

by Alice Mary Greer

How often when someone has come up with the remark, "I cannot make an arrangement. I haven't any flowers," we have retorted, "You have leaves, haven't you? Weeds? Roadside grasses? Possibly a scrag or stone?" Now here comes the versatile **Emma Hodkins Cyphers in *The New Book of Foliage Arrangements,* Hearthside Press, 1965; 182 pages; $4.95,** emphasizing that very point!

Cyphers is as expert a writer as she is an arranger. Listen to this: "What would the world be without leaves? Their coloring matter is the only substance that can make the starch or sugar essential to all life, including that of man. And so leaves mean existence. The artist's task is to see and feel the charm of their patterned shapes. Artists of all times, working in all media, have used the leaves of plants as a source of inspiration second only to the human form . . . Since it is apparent that Nature's talent for leaf design has always inspired artistic man, it is logical that their twirling, twisting, drooping, and upright patterns should challenge creative imagination in the arranger . . . Life is enriched by anything that kindles a spark of interest into fiery enthusiasm. Study the trees in the changing seasons. In their leaf formation, as in nothing else, Nature displays her tendency to design. Young, pale green leaves, lacelike against a cloudless sky of spring, lush green masses of summer's growth, a riot of color in the autumn scene; sombre brown leaves forming open patterns as they cling to bough of beech and oak when winter comes; the shape of each individual leaf echoing the shape of the tree as a whole—all this is a miracle of texture, hue, and shape to the flower arranger."

It is an interesting little book, going right along with the modern trend in living that stresses the use of the unusual. It's full of good illustrations, gives practical help for the gather-it-yourself, do-it-yourself arranger, and, bless you, is bound in a happy, cheerful Alice-blue cover!

***Flower Arrangement with Antiques,* Beth Hemingway, Hearthside Press, 1965. 199 pp. $5.95.**

ART joins hands with art; hobby joins hands with hobby. Beth Hemingway in this her second book — her first "A Second Treasury of Christmas" — demonstrates how her hobby of antique collecting joins hands with her hobby of flower arranging, for she tells interestingly how she embellishes and enhances her arrangements with the use of antiques as props, containers, accessories and environment.

The author, a lecturer, flower show judge, arranger, is well-known in the South, where her 200 year old farm home and studio in Hanover County, Virginia, is on the trek of many an enthusiast. Indeed, her book is redolent with antique atmosphere of the Old South.

No one can accuse Beth Hemingway of side stepping the practical for the theoretical or ephemeral, for in her text she gives step by step details for antiquing and preserving plant material, for making various period floral designs, for applying home remedies for rust, gilt, metallic finishes, broken wood, china, etc.

Good illustrations — 96 of them and six equally good colored plates — add to the value of the book.

The scope of the subjects treated can be judged by the chapter headings; Basic Flower Arrangements and Techniques for Collectors; Flower Arrangements for Living Room and Library; Centerpieces and Other Dining Room Decorations; Flowers for Other Places in the House; The Collector Decorates for Holidays and Other Occasions; The Flower Show in an Antique Setting; Restoring and Waterproofing Old Pieces.

Amidst the multiplicity of books on flower arrangement rolling off the press these days, one sometimes thinks, "Why go over all that again?" Yet each new publication presents a fresh slant that triggers the imagination. *Flower Arrangement with Antiques* does just that.

***A Sunset Book: Bonsai: Garden Pools: Garden Color:* Lane Books, Menlo Park, California; 1965, each 80 pages, $1.95. Paper bound**

In speaking of these three books we are tempted to be a bit facetious and quote; "Cheaper by the dozen," for here comes *Sunset* with more additions to its already long list of selected home and garden publications bringing the total number (as see back cover of those books), to 84! Mass production may be one of the reasons why such fine material can be sold for such a low price. With these low prices on hand and with the well-stocked public and club libraries rather thickly scattered throughout our city and county, there is no excuse for any inquiring mind to go uninformed these days.

As is true with all *Sunset* books, all three of these publications are bursting with illustrations—good ones. Geared primarily for the layman, even the beginning gardener, they present sound principles and theories, discuss and give examples of the older, the conventional, and the ultra-modern schools. They give reliable information, and show in great detail plans, designs, techniques and processes of construction, so that the do-it-yourself readers are not left dangling with half complete information when inspired to carry out in their own gardens the plans so enthusiastically presented.

Anyone who has on hand these inexpensive, yet valuable *Sunset* books and falls in line with their admonitions and guidance should reap results.

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UPRIGHT GARDENING

by Clifford H. Pope

MANY a retired person finds it hard to garden because of a back that no longer bends readily; stooping, kneeling, and squatting for any length of time have become all but impossible. Must the fascinating hobby of growing flowers and trees be given up by such individuals? I shall show that every type of work with plants can be done from an upright position. Speed will be reduced but speed is often unnecessary for those who are sixty or more years old. First I shall describe the implements most useful to the upright worker, and next give details on their uses.

A ladies' shovel with a handle at least four feet, eight inches long (for a person about five feet, eight inches tall) is perhaps the most useful tool of all. A short handle can be lengthened in various ways, among them are bolting a dowel to the handle, and inserting the handle into a length of plastic pipe.

A scuffle hoe with a handle as long as that of the shovel is also of great value. The extension of the handle can be made with lighter material than that used for the shovel: a length of heavy plastic tubing will do. A thin wire wound around the hoe a few times will convert it into a lifter of weeds and other objects, without interfering with its usefulness as a weeder.

A light hoe with a handle almost as long as that of the shovel will be useful.

A 14-inch file beaten out so that it has a sharp edge and point, and curved into a hook-shaped implement makes an invaluable tool. Of course it must be mounted on a long handle. An iron worker with a forge or a blacksmith can shape the file.

Lopping shears with long or lengthened handles will do well for low as well as for moderately high pruning. (High pruning is, of course, no problem for the straight-backed worker.) Heavy rubber tubing may be used to lengthen short handles. To insure a snug fit, the shears should be bought first and taken to the store where the tubing is sold.

Various hand-weeding and cultivating tools are readily mounted on long handles. Every gardener is apt to favor some special type.

A picker-upper like those used by trash collectors in zoos and parks is a boon to the upright worker. A wire twisted into the form of a hook will allow the tool to hang on the belt and thus be handy at all times. Picker-uppers can be bought at Hunt's Wood Shed, P.O. Box 1795, Colorado Springs, Colorado. Ask for a "Park Patrol." Such a simple tool as a two-edged razor blade (or similar paint scraper) mounted at the proper angle on the end of a dowel is handy for cutting low tree sprouts, strawberry runners, and, in conjunction with the picker-upper, gathering strawberries.

There is nothing like a light, short-handled bamboo fanshaped lawn rake for picking up small objects and trash. It can be used nicely with a large but narrow carton (carried in the other hand) as a receptacle.

Some simple forked rods commonly sold for turning faucets can have their handles modified into manipulators of hoses. Moving hoses can require a lot of back-bending.

A child's large wagon of good grade is the most effective transporter of dirt, rubbish, and so on. The American wheelbarrow is much too hard on the weak back. As a supplementary mover, a sturdy hand or warehouse truck with modifications is helpful. A bottom of heavy cardboard or of some light water-proof material that will take considerable wear will improve its versatility. A sheet of aluminum can be bent at an angle to form a shelf about halfway up the truck (which stands vertical when not in use). This shelf is readily held in place by one bar and can be removed in a moment. It may be reinforced with two iron rods, and is convenient for the transportation of boxes and bags of fertilizer, and for plant trays as well; heavy rocks can be moved about on it, too; garbage cans fit it nicely (with the shelf removed).

A light plastic tube about a yard long and an inch in diameter will enable the gardener to place precisely seeds and small quantities of fertilizer without any stooping. It is advantageous to expand the handle end of the tube to avoid loss of seeds.

The person whose back is not very stiff or who feels it absolutely necessary at times to work (kneeling) with the hands near the ground can use a lean-on device. Fasten two light boards or flat metal frames together at one end with wire or hinges so that they move freely. First balance on top and then secure a water-proof cushion reinforced on the bottom with wood or metal, also freely movable. The size of the two supports should serve the convenience of the worker, just so that the cushion must fit his chest, which will be supported by it. Two strings or chains will keep the supports from spreading farther than desired.

The constant necessity of digging and moving dirt about confronts the gardener. The small, long-handled shovel makes it possible to remain erect while both digging and moving soil. A small shovel may move only half as much dirt as a big one, but the result is no different. The small, long-handled hoe, the scuffle hoe, and the hook made from a file allow the erect worker to do the basic types of cultivation effectively. Stooping when setting out plants can often be avoided by lowering the plant (with its dirt) on the hoe and adjusting its position with the hook or the feet. Bare-root plants can be manipulated with the picker-upper.

Weeding with the long-handled scuffle hoe is easier on the stiff back than is weeding with an ordinary hoe. The hook is excellent for weeding and thinning out where plants are too close together to allow use of the larger tools. The various other special weeding tools on long handles may compete with the hook, but none is so versatile.

Moving the hose around while watering is always a bother that can be reduced either by the hook, the modified handle of the faucet turner-onner, or the picker-upper. Small weeds can be pulled up with the latter.

The inventive individual will think up other back-saving devices. It is evident that gardening can be done by anyone who can still walk about freely and use at least one arm well.

FLOWER ARRANGERS' GUILD OF SAN SAN DIEGO

presents

Odes to October

You are cordially invited to attend
"Odes to October"
Flower Arrangement Show
Amateur photographers may take pictures from 9:00 to 10:00 a.m. on Sunday, October 31, 1965.

Current trends in flower arrangement will be presented by members of the Flower Arrangers' Guild of San Diego in their annual show, "Odes to October" on Saturday, October 30 from 1:00 to 5:00 p.m., and Sunday, October 31, from 10:00 a.m. to 5:00 p.m. This show will be held in the San Diego Floral Association Building, Balboa Park.

Using flowers, plant materials, accessories — including objects of art, in place of rhymed lyric, the beauties of October will be honored by members of the Guild. Golden days and shades of yellow, autumn days of red and orange, soft days of foggy gray and drifty green, dark nights of moonlightless black, and desert night of starbright white;—these captured memories of the arrangers will be yours too, as you view their fall Ikebana show. One section of the show will present collages, while another section will contain assemblages — that "mid-twenties" trend of diverse elements which may or may not be fastened together. Odds and ends fetched home from vacationland will be coordinated into a composition by one arranger, while another will create an assemblage of related and unrelated objects. A modern arrangement using abstract forms of wood will be featured in the show, as well as abstract arrangements — the guessing game between the originator and the viewer. Large arrangements, small arrangements; tall or narrow arrangements, short or wide arrangements, floor arrangements as well as table arrangements all will be included in poetical tribute to October.

Proceeds from this show will be donated to the planned Garden Center of San Diego. Information regarding this event may be obtained from Mrs. John Casale, president, Mrs. Ralph Rosenberg, show chairman, Mrs. L. L. Carringer, ticket chairman, or the San Diego Floral Association. Mrs. R. Middleton is co-chairman of the show. In charge of staging is Mrs. Maisie Dodge; Mrs. Harry Cutler, treasurer and hostesses; Mrs. J. Wells Hershey, publicity; Mr. and Mrs. Stanley Miller, patio displays; and Mrs. John Casale, entrance.

Description and photograph by Mary Jane Hershey.

ARRANGEMENT BY MRS. HOWARD RICHARDSON

Tawny bamboo containers of varied heights have been placed together against an antique-gold wall in tribute to the golden splendor of October. Symbolic of lines of a verse, these containers have been filled with the dried flower sprays of the date palm *Phoenix Dactylifera,* bright yellow chrysanthemums and Algerian ivy. Height and forward motion is obtained by the arranger in the careful placement of the russet-brown sprays of the palm, is repeated by the dark green ivy, and together provide a contrast to the monochromatic effect of the background, flowers and containers.

California Garden

OCTOBER-NOVEMBER, 1965

A Call for Street Trees in San Diego

by Roland Stewart Hoyt

Photos by Betty Mackintosh

— our city with its desperate and undiminishing need for trees being the more important aspect of the subject. This area is a place for the best of gracious living, but also the site and bearing where basic conditions for tree growth are not satisfactory. There are probably fewer matured trees here than in any other city of comparable size in the United States. This is a critical flaw in view of observation and comment of outsiders and the claim above. Here, where we wish to impress others with the quality of living and add to the natural attractiveness of the city, this want of a prime element in the picture is disgraceful and outrages the image we are trying to build. This is reference and responsibility primarily to the shallow soils that dominate most of the county. Here we have the poorest soil cover in the state and this is an over-riding cause for the lack of trees. What can the answer be, at least for the street?

Serious Try

One thing the Chamber of Commerce tried would be a start. A resolution was prepared for the City Council a few years past which would require the subdivider to place the sidewalk at the curb unless a minimum of eighteen inches depth of friable soil could be assured in the parkway. This paper never reached its goal and we still set trees in a narrow, shallow strip of ground the length of our streets in a ridiculous repetition of error.

Even then, with added depth, this system of assigning a species to an appropriate parking width, while a worthy attempt to offset the evil, is a misconception and delusion, a fallacy mostly since it overlooks the very basic fact that little trees grow up to be big trees. If they are to give acceptable service, they must have space in which to expand. Otherwise they ultimately and most surely out-grow any usefulness before their time. Do you know what it costs to remove a large, established tree strangling between walk and curb? The sum would install a goodly distance of new stock back at the property line where it belongs.

To repeat . . . this tree-net of San Diego has been lamentably overlooked, simply by-passed and it isn't that the Council has shunted the problem aside. Recently a generous appropriation was made available for street tree planting. By the time half the money had been spent so many of the trees had died through the neglect of the property owners being served, the project was abandoned and the remaining money returned to the general fund. It would appear it is the people who need enlightenment . . . you, possibly. Surely, in no other manner or degree can the face of San Diego be lifted more effectively as we present ourselves to the rest of the world, most of which has the tree as a gift of the gods. And so . . . earth to dust and back to desert we go . . . but this is a CITY IN MOTION that claims a look into the future, and what it sees there is something else. Will we do something about it now? It may be said our gift is climate. Add a verdure here and you have a whole, which is totality and masterstroke.

Commemoration

The City of Los Angeles is making great plans for city beautification in celebration of the beginning of California (1769-1969) . . . but here, San Diego, is where it happened. Can we ignore that fact? Can *we* do less? On the look we take at this and its good digestion will depend the vigor, the enthusiasm of reaction for betterment of our streets and gardens not only for this occasion, but forever. An opening organization, TREES UNLIMITED has been started, made up largely so far by members of CITIZENS COORDINATE and the FLORAL ASSOCIATION. Who else will join? Will you help with this thing of meaning and substance so fresh and hopeful . . . redemption from the sterility and waste of the years?

Trees Again

A tree is a living thing, subject to the normal iniquities and moral rectitude of any other organism struggling for survival. There will be much of the first in its make-up when up against the arrogance and arbitrary demands of man. It knows where

food and moisture are and like any other breathing entity, proceeds to get its share. Under the walk it goes, a root-hair at first, then a wrist-size root leading to the source of all good things . . . water and the fleshpot at the house. Up goes the walk and the city pays the bill for repair. Where a tree has persisted long in its struggle, to widely out-grow its confined quarters, out goes the curb with a once repaired sidewalk and again the city pays the bill to a tune of $75,000.00 per year.

If a consistent tree-cover for San Diego is ever to be achieved, something must be done to provide root-room, and the meaningful approach, again, will be to place the walk at the curb, monolithic or otherwise. Past thinking, however, has presented so many objections, that only a small percentage of streets in the city has been so favored, notably along school properties where intelligence sojourns. It finally comes down to the question . . . do we really want trees in the street? If so, then they surely should be placed outside the walk. Here there will be ground space in which bracing roots can reach out four ways to hold and to feed, the site still within the street boundary for control. Here the householder is prone to accept the weanling as his own. He will do something about its care, which is known as maintenance. It is his tree apparently and an attachment develops into a kind of cohabitation. We are inclined to hold dear and cherish the helpless that has been left at our door; to develop a feeling of solicitude and concern for its well being . . . there will be no dead sticks here.

Therapeutic Value

The years point to too many trees removed from the parking just as they are reaching maturity for beauty and service. This is an illogical and unwarranted waste in money, energy and time and in all the natural benefits that accrue to people in this association. Think of the past as related to trees and the human race. Man has grown along with them in evolution. They are a part of his intimate traditions and of the ages. Here was shelter when there was little such. Sustenance was provided when there was little to eat. And now, they furnish a spiritual contact of sorts with the infinite which is so subtle that few recognize it. It is there. There is leisure time now in which to think . . . or to brood. So much in the subjective concept is being lost. In one generation we have passed from a so-called industrial age through one called atomic, on to now, a spacial outlook . . . fantasy for the time being. How many follow along in this fast-moving shift of sands at our feet and do so in soundness of mind and rationality . . . perhaps even sanity. A sniff, a look or other prompting now and then of something substantial and long understood; something of the spontaniety of nature, as of a tree or artifact out of the primitive, tends to open the mind and clear the web-stuff like fresh morning air. This relates back to the earth, gardens, animals or a tree-lined street, a fresh lease so to speak. Perhaps we might get along with fewer rest homes and asylums.

Salk Institute, as seen through the silhouettes of *Eucalyptus lehmanni.* An extra wide curb for walking may be observed in the foreground.

Artistic Nature

Here is another aspect of the subject that may be expanded for whatever it may release in understanding. A broader look and deeper probe will see the planting of a street in the nature of an art form and expression. An observant person traveling a highway or, in slower tempo, a city street, will have sensed a kind of rhythm resulting from passing objects, an arrangement and sequence of masses in more or less agreeable succession. This will be accentuated as experienced from a fast-moving train. Further thought leads to some analysis and placement of values that might prove beneficial to the public as people use streets, avenues, boulevards. Impressions will impinge upon the mind whether we see or merely feel the passing show. It is a pageant to see . . . Lydian strain to hear, with variations to touch the inner man for good or otherwise. There is some organization in this or there is none. We are moved and only vaguely wonder why. It can be a kind of music. It can be verse . . . the strange new art form above. We go to the concourse for transport, the relief or easement of a tune. This one has no end . . . believe me. A concert will end, but this one can carry on forever in the heart of a city.

Symphony of Mass

Time was when we accepted the tree in the street at stated and measured intervals, but then happy chance stepped in. Nature took a hand. Civic control had not reached present proportions, so that this concept gradually broke down to a degree with a resulting change in meter. Actually the original was a rather elemental approach, but a first step that could be likened to the tom-tom in the evolution of music. As individual trees died out and were replaced, frequently by the adjacent property owner and often with another species, a more mellow, flowing composition came into being. Spreading trees from over the property line encroach with some further modification, a variation in mood as of movement, innovation, change. Thus the tom-tom becomes something else, a swell and lowering in passing tree forms and textures that may be related to or compared with agreeable sounds . . . a melody or

variety of impressions with the solid pulse-beat of the dominant species

The next stage in street planting could be a studied composition, a heavier form for beat, divergence in other species for melody, all an excitation of feeling, progress toward a more mature rhythm. This is to touch the participant with that which we call harmony. It surely is not impossible of accomplishment or impracticable. We could, in fact, relax in patience and with time of no concern, see it happen more or less naturally. This is nature. Of the thousands that streak through the wooded Cabrillo, many must touch for a moment a certain peace, an unrecognized tranquility that starts or ends a day otherwise cluttered up with smog-stuff.

Help From Above

Now, at this particular time, there are tydings of good note riding the wind, stirring news in these relations, encouragement from both the President of the Republic and its Federal Housing Administration. The chief executive is promoting natural beauty in general. This will mean more trees along with other plantings for this place we are talking about and there appear to be some teeth for backing it up. Just recently the F.H.A. has reacted by making a serious start toward putting utilities underground. The land developer will then have a more attractive product to sell, with the entire public benefiting. This is to be done almost without pain for the entrepreneur, due to government help in more attractive financing . . . the mule approach from the front, rather than from the rear . . . firmness dominating the obstinate. They are even taking a look at existing overhead wires and cables.

There really would appear to be a breakthrough here in the making when Frederick B. Holoboff, president of the California Utilities Commission, speaking before the Rotary Club of San Diego of undergrounding lines, calls it "an investment in beauty and in the future." How true and what words of understanding, hopefully of good portent. He uses the term "aesthetics" adding it to the vocabulary of the whole clan. This should help materially in the present passing-over of engineering to an appreciation and implementation of beauty in the landscape. As of now, we stand with upturned eyes at this wondrous switch in economics and in a point of view. We can now hope for a sideling glance at the walk-curb combination, a freer area next it for the underground . . . and the tree.

Stately Monterey cypress, one of several that disrupt the sidewalk parkway on Nautilus Ave., La Jolla.

When the sidewalk is a part of the curb, as at the home of Capt. H. C. Lowry, U.S.N., Ret., 3141 Shadowlawn, Loma Portal, more space is left for the Liquidambar tree on the corner and the rare Chiranthodendron towards the garage.

Science and Health

Whenever the matter of trees comes up, generalized or specific, inevitably one is drawn to an instinctive reasoning and reflection on his part in the scheme of things. Their function in the continued health and well-being of man is at stake and only recently belated publicity has been appearing to that effect. This is becoming a more particularized discussion and primary consideration in conservation. Now it is taking on a subjective aspect beyond the long-fought idea of the being, the tree itself. There is no exception here. As smog builds up with new pollutants ever on the increase; with population continually and markedly on an upward curve, another service of the tree to the commonweal may be noted. This works locally, nationally and world-wide as the problem grows. Seldom is it given the weight it deserves. The moon and manner of getting there may seem important, but the poisoning of the atmosphere and ultimate imbalance of its gases is immediate and becoming more urgent for solution. Products of combustion from that great storehouse, the fossil fuels of the ages, coal and petroleum are being set free at an always increasing rate. Only now, and locally is anything being done about it to lessen the danger.

As the world shrinks in size under the load of population, it becomes larger as a problem. This is no paradox. You, your furnace and the engine in your car are gulping oxygen and spewing out carbon dioxide along with other quite noxious gases. At the same time we cut out vegetation . . . forests, orchards, brush and grass plowed under to raise grains that can only be stored or given away. It is these which should be converting the dioxide and freeing oxygen to replace that which went into you, your furnace and the engine. The balance of

the gases of the atmosphere is thus becoming more disturbed as time produces more people and more machines. It may well be that we are really and gradually but surely meddling too far and too fast with this admixture, the air we breathe and so, the ultimate survival of life on the planet. The moon could wait. This may not, much longer. Each tree with its oxygen-freeing capacity brought into maturity before a dangerous submergence under this darkness will help to hold a line until we come to some realization of what is happening. Some future generation might well find itself beyond a point of no return. This could be real . . . not just a nightmare of the scientists. Looking at the vaulting aspiration of our time and the lack of will or ability to follow through to ultimate results in our thinking . . . it is to wonder whether Armageddon in the end may be a state of mind and not an event.

An Experience

The Black Hole of Calcutta was one of the horrors we have read about and small enough to understand. On this evidence above, we must see to it we don't allow something like this to develop on a greater, utterly grand scale, an enclosing band or inversion of gases which tend to smother. We must not let it get beyond a point of handling or control. The fact that this will have to develop over generations, makes it the more dangerous. We could go over the hill without the capacity or will to get back. We are now in a kind of exstasis or tumble-down dream . . . the human race, when it accepts the status quo and yields in consent. Plant a tree for YOUR part, that the race may survive in the health and vigor of its evolution.

Can We Learn?

There are straws for misgiving recently reported which are also "riding the wind." An immense irrigation project is being dreamed up whereby water may be brought from the arctic regions to resurrect the parched lands of the south. One hundred billions of dollars is mentioned. This is well-intentioned, laudable, but consider more millions of people in areas that at best can have but minimal growth, afforestation to offset the wastes. At the same time we are experimenting, evidently with some success, in conservation (?) of water. They are cutting out acreage of native cover, natural growth in order to build a slick of oil or asphalt to collect and conduct rainwater into depleted city reservoirs . . . clever, but how sound?

FRONT COVER PHOTOGRAPH — *PODOCARPUS ELONGATA*

For thirty years or more this tree, sometimes called the Fern Pine, has had root room to develop on the front lawn of the O.B. Lyons' home at 2957 Locust St. in Loma Portal, thanks to the enlightened subdividers of fifty years ago who put sidewalk and curb together. (They also built a Clubhouse and a golf course that extended down over what is now a business and theatre area.)

It is claimed that Podocarpus seeds were brought from Africa by Theodore Roosevelt. Some were given to a Southern California horticulturist who shared them with Kate Sessions. She planted the first specimens in San Diego, one of which may be seen in the Rosecroft Begonia Gardens on Point Loma.

If you have come this far, you should be ready to figure the long range angle of this one for yourself. It is said that simian tribes, when crowded, develop an unrest and fitfulness to the point of killing each other and putting to death their young. This may be no more than nature bringing about a re-balance in population. The monkeys do it one way. Can we improve on it? Must we stand by in impotence for the death watch and rattle of civilization?

After All

Coming back to the present, the hour belongs to us and we can talk trees again. The real wallop in this nihilistic, image-breaking discourse concerns the status of the sidewalk itself. It could be losing its place in the scheme of modern living. The term is anachronism. They are becoming out-dated in point of time and of use. One enters and backs out over them to drive down the street and the neighbor walks a way to meet the bus. There is little strolling or other application as of exercise and there is seldom anything approaching mass foot traffic. What is their important remaining purpose as transition in growth proceeds? It would appear now, that we might be more selective and adapt capacity to need. It is easily recognized that certain streets will require full walk width to carry an expected load. Others can be reduced in size, possibly in some cases to 20"-24" width at the curb. Already some dead-end streets or lane-type roads are doing nicely without any walk at all. Car traffic there tends to be very light and drivers more careful because children will be around. All requirements are simple and the tax load on the property will be reduced. Old and entrenched notions cannot long be obscured in the light of mature, fruitful thought as it ripens under experience. After all, no image is here totally destroyed, merely adaptation to changing requirements, a little light set against the gloom . . . and more trees.

Hillside planting, where no sidewalk interferes, is shown at the residence of Thomas J. Jefferson, 7390 Via Capri, La Jolla. Note that there is ample room for a large olive tree.

BEGONIAS

PLEASING PATIO PLANTS

"Sophie Cecile," new silver-spotted, red-backed Angel Wing begonia, a much sought hybrid from Wisconsin.

by Alice M. Clark

Photos by Betty Mackintosh

MOST gardeners are delighted to find plants that offer an easy change of pace. In the east where begonia growing is difficult, all types are flowered with great care on interior windowsills. In San Diego the outdoor temperature closely approximates that of the original habitat of many begonias yet growers seem unaware of this wealth of material just waiting to beautify their outdoor living areas.

This county should be famous for its begonias the year around, as it was in the early days of Rosecroft and Montalvo Begonia Gardens. Begonias are so decorative it can't be their fault that we see so few of them — it must be due to a dearth of knowledge about this versatile plant. Without a demand for begonias nurseries cannot afford to stock them so a vicious circle is established with everyone the loser. This article is an attempt to focus attention on the advantages of this rewarding family. Few retailers will have all the plants mentioned but there will be enough similar ones to make a good start.

Begonias and outdoor living go together. Along the coast they will grow happily in northern and eastern exposures without overhead protection from the sun though they do need shelter from the wind. If overhanging eaves are not too dark they thrive in the added humidity of swimming pools. They are most responsive to higher inland temperatures beneath saran cloth or lath covers. For years San Diego county produced more new begonias than any other part of the country, which should prove how well adapted they are. Sometimes I think maybe they were too easy to grow — in the days when gardeners liked a challenge. Now, when time is so scarce, smart growers should use these perennials that stand up on their own stout stems without coaxing or pampering and produce verdant leaves and tinkerbell flowers year after year. Begonias could be tranquilizers for the harassed gardeners.

Probably the best known among the many types of begonias are the tuberous for whose supreme beauty no fitting adjective has been coined. But, those who see them growing in all their glory in Rosecroft Gardens on Point Loma for the first time, are often so overwhelmed by their breath-taking perfection of form and glowing colors, they are afraid to try to grow them. Tuberous begonias are no problem, given plenty of light, good circulation of air, good drainage and sufficient, but not too much moisture. Like roses and other worthwhile plants, they do need spraying if mildew shows up. In warm areas they thrive under the light shade of trees or saran cloth. In the cooler coastal regions they will take sun up until noon, without cover, and what exclamatory highlights they always make!

ON most outdoor terraces plants are the decorative elements that add color and soften the harshness of construction materials. In the Lowry home in Lemon Grove the comfortable shady sitting area at the back of the house is the center of many activities but it actually seems to exist as a place from which to view the fern and begonia garden that stretches beyond it. There, in the space of five years, (one with a killing frost) a tangled mat of foot-high devil grass has been transformed into a restful plant paradise that is an inspiration at any season. Today this is the retire-

ment home of Edna and Joe Lowry, owners of the Sierra Vista Nursery for 19 years. Now they work as much or as little as they please but they have time to enjoy the results of their effort and to share it with others.

A high fence cuts off the wind on this 36 by 60 foot garden. Saran cloth tempers 75% of the sun while a waterfall adds humidity. Seeking to preserve the best of the past Mrs. Lowry grows worthwhile old begonias as well as the new ones that show the trends and patterns of the present, and perhaps the future will bring some of her own hybrids.

As you follow the winding garden paths you will hardly notice that most of the begonias are in containers. When they get too large they do go into the ground but wooden tubs and boxes are favored because moveable plants can be arranged for more pleasing effects or to improve their exposure. Wood retains moisture longer than clay and its rustic color seems to complement that of leaves and flowers. Smaller plants thrive in rubbery black plastic pots that are very light to handle. They are almost unbreakable so they can be used indefinitely as plants slip out easily. The black color is very inconspicuous, the pots drain well and do not collect alkaline salts around the rims. To a begonia enthusiast this garden is like a candy shop. At every turn there are so many delights to recommend for specimen plants in other patios that it is difficult to choose those for comment. Here are a few to savor.

HANGING baskets are fine to suspend from beams on the terrace or to use as accents in wall pockets or on stands and pillars. That big begonia beauty, **Raythel,** in the forefront of the Lowry shadehouse commands attention. It is a scandent hirsute fibrous whose rich thick dark green leaves seem to pour out of all sides of the container to three feet or more below. This plant has never borne its pink flowers but the growth of the shining ruffled fuzzy-textured foliage is so vigorous and decorative that blooms are not missed.

If it's flowers you want, look for the darkleaf species *B. mazae,* from Mexico, flowing with small thin leaves of sage green, marbled in brownish vein patterns that show through from the back. Mrs. Lowry's specimen was literally smothered in pale pink flowers all through spring and early summer.

The two plants above may be hard to find but not that sturdy eighty-year-old *B. scharffiana,* granddad of so many fine hybrids. More than twenty years ago I described this favorite of mine in *The Begonian:* "Seen in a hanging basket, with the sun coming through its red-backed foliage and lighting the red velvet "ears" of the newly unfolded leaves, one is instantly captivated by its visual charms. Irresistibly one touches the plushy leaves and the brilliant red "whiskers" on the ivory-white flowers. . . . The leaf sinus and veins, neatly carved in the mossy green upper surface, are a very light green, completely hiding the russet-red texture of the underleaf unless a beam of light sends a rose tint glowing through. Especially charming is the thick cut edge of the leaf with its double fringe of hairs where the two color surfaces meet. . . . The leaves often reach a foot or more." Gangway, for a big wonderful begonia!

There is another striking begonia hanging in the Lowry garden which can be found in several nurseries. **Ellen Dee** is a fibrous cane type whose smooth bright green leaves, shining, pointed, scalloped and ruffled, toss themselves out of their basket as if riding the rapids of a stream. The heavy clusters of bright red flowers serve as anchors near the ends of the branches. In 1948, Woodriff, of Oregon, produced it from a cross of two difficult-to-grow basket species. Mrs. Lowry obtained a young plant from him which, when it was in full bloom, Ora Wilson displayed as a new

The doorway behind "Rubra Odorata" shows its size but only a visit can convey the charm of pale pink flowers against the smooth green leaves of this old Rosecroft hybrid.

introduction in a Floral Show in Balboa Park. Marked by the initials of its parents, *B. limminghei* and *B. dichroa,* it soon became known as "L and D." With the originator's permission Ethel Calloway named it the easy-to-remember girl's name, **Ellen Dee.** It was so registered and has been deservedly popular ever since. Look for it.

THERE is infinite variety in the upright smooth-leaf cane begonias, (generally called Angel Wings because of their leaf form), that make such fine container plants. The foliage can be plain green, silver spotted, red-tinged or ruffled, with many kinds of indented or cut edges. All are good growers with generous warm-weather bloom.

Perhaps the best known of this type is the old grand dame, **Lucerna,** a Swiss hybrid of 1903 from *B. coccinea* parentage. Twenty years ago it could be found here in hedges six or more feet high. Right now some of these plants are beautifully featured at intervals along a fence entirely without overhead protection in the La Jolla garden of Katherine Sneve. The large strong dark green leaves, angled and pointed, twist and turn, the better to show off their silver spots and red linings. Covered with huge clusters of dark red blooms most of the time, these plants really dominate the garden. They are easy to grow if the old wood is cut back in the spring and fresh soil added, but watch for mildew.

Sophie Cecile is as new as **Lucerna** is old, and already a hybrid of distinction and a scarce item. It has so much personality that our photographer, on her own, selected it from a mixed bed of begonias for a close-up. Its large deep-green leaves, lobed and serrated, are splashed with silver and backed in red. This bushy upright grower is well covered with rose-pink flowers when the weather is warm. The shape of the leaf is mindful of its seed parent, *B. septrum,* from which the Wisconsin begonia enthusiast, Belva Kusler, developed this new charmer.

Corner of the Lowry garden in Lemon Grove showing a bed of hirsute fibrous begonias that range from a French hybrid of 1882 to several well-known varieties originated by San Diego growers.

Most of these old smoothleaf upright begonias originated at Rosecroft Gardens. One that arches high above and beyond a doorway at Lowry's is the eye-stopper, **Rubra Odorata.** It is positively exuberant, even in winter, with hundreds of bouffant soft pink blooms on many full, branching canes. When it was hybridized *B. coccinea,* the specie parent, was known as *B. rubra.* Over by the pool is **Nordi** another good grower with red flowers. There are some fine specimens of similar crosses that Jerry Hunter made at Rosecroft that are named for birds, such as **Oriole** and **Flamingo,** according to bloom color.

A handsome Angel Wing, with deep pink blooms, by the front doorway of the Calloway home in La Jolla was called **Rose** for one of the old-time Dunning family. A cutting of this begonia lost its name when it migrated to Ventura where it developed into a luxurious plant ten feet tall. For years it was known as "Hazel's Front Porch." Another spectacular beauty that draped itself outside Ora Wilson's back door was designated by its location until permission was obtained to call it **Delight.** Come to think of it, nearly all of these Angel Wing varieties seem to occupy and live up to positions of importance. Given a chance, they grow in beauty and grace. Why not start your "greeter" now?

HAIRY fibrous begonias are another type used by Edna Lowry to give background depth. At the bottom of the group photograph of these begonias are a few leaves of *B. hispida cucullifera,* a species that has tiny hairy green cornucopias sprouting up here and there on its veins. Flowers of **Margaritae,** an old French hybrid of 1878, are to the fore. Still favored for its bushy habit and quantities of blooms with deep pink whiskers on the outside petals which, like Jack Benny purses, rarely open. One of its parents, *B. metallica,* from Brazil, whose leaves have a shimmering

metallic lustre, is still available. Against the fence on the left is **Pink Prunifolia,** a Robinson seedling with dark hairy leaves about 4 by 8 inches. These are cupped and puckered so they show the prune-colored backs. High up beside it is **Chiala** with thick ruffled leaves that are a smooth dark green on top and large drooping panicles of lime-green blooms. It was raised from German seed by William Grant of San Diego around 1930. Below and to the right is **Mrs. Wallow** whose foliage is larger, flatter, broader near the stem, and not as pointed. The brilliant red undersides of both plants are faintly covered with hairs. The pink flowers of **Mrs. Wallow** have pink bristles.

Thirty years ago Mrs. Fred Scripps found an interesting chance seedling in her lathhouse, the present site of the Catamaran Motel at Pacific Beach, where enormous staghorn ferns from her garden may be seen. That begonia which now bears her name is a vigorous tall grower whose hairy light green red-backed leaves with varied numbers of finger-like lobes have occasional rudimentary leaflets at their centers. Look to the left of the post at the top of the picture. The small pink blooms on large spreading inflorescences may be glimpsed at the upper right corner. The strength and unusual patterns of **Mrs. Fred Scripps** make it worthy of its namesake and fun to grow.

Speaking of these hairy types, I was delighted to see two fine groups just brimming over with pink blooms right outside the dining room window planter of the OceanHouse. Let us hope they stay when the new owners take over. Incidentally these hirsute varieties will stand more cold and more heat than any other begonias, besides blooming all winter, and there are dozens of hybrids to choose from, if only you can find them.

A fairly new, large-growing fibrous begonia that is stealing the limelight is a silver-gray-green beauty known as **San Miguel.** A local hybrid of Vergil Stark in 1953, it does credit to the mountain for which it was named. Members of the San Miguel Begonia Branch were responsible for its care and introduction as a new cultivar at the Begonia Convention in 1957, where it won an Award of Distinction. It is a full many-stemmed upright type with heavy, often foot-long, broad oval leaves that end in a short point. The influence of the seed parent, *B. venosa,* is apparent in the frosty fuzz that covers the shiny green leaf surface and in the pale green, close coupled, persistent stipules from which the foliage emerges in beautiful puckers of silvery green velour. Stems and leaf backs are a faint red beneath a downy scurf. White flowers on long petioles are nothing special. The plant is noted for its many stalks and husky fast growth. It does best with plenty of strong light.

IF you are featuring begonias in tall containers use some of the lower-growing rhizomatous to group around them. Their leaves stem out from the center to make handsome bushy plants. Perhaps the most startling of these is *B. masoniana,* originally known as **Iron Cross** because of the very realistic bronzy imprint of that medal on its hairy yellow-green leaves. Greenish-white flowers have maroon bristles. It is available in some nurseries. **Ricinifolia,** a very old rhizomatous, has light green leaves cut castor-bean style, beset with wiry hairs on both sides and flower stalks that float a froth of pale pink blooms high above its leaves. It revels in full sun in the Sneve garden in La Jolla.

Of the darker types there is **Freddie,** a fine Ziesenhenne hybrid, whose 20-inch shining deep-green pointed leaves of pond-lily texture sport red backs. They make huge spreading plants topped by 3-foot branching inflorescences that break into galaxies of small pink blooms most of the year. **Crestabruchi** is another California product with dark, almost brownish, green leaves with fabulous reddish curlicues on the leaf edges. **Ricky Minter,** named for an Encinitas boy, and **Madame Queen,** a new hybrid, are similar beautiful curly varieties.

Most gardeners are aware of the colorful **Richmondensis,** flouncing with flowers, that almost cover its small leaves, and the charming dark-leaved semperflorens with double pink or red blooms, but they should also get acquainted with dozens of fascinating small growers with leaves of all shapes, from cut maple to round, spotted, streaked or lined with brown and edged with eyelashes. Most of these carry some strain of the species, *B. boweri,* named for a San Diegan, Constance Bower.

Try just a few of these begonia combinations to brighten up your outdoor living area and in a few years you may like them so much that you will find yourself expanding into another shade garden just as the Lowrys did.

Rose-tinted, ruffled and crested leaf margins have made "Crestabruchi" a long time favorite among rhizomatous begonias.

"Raythel", a newer hairy fibrous hybrid by Schwerdtfeger of Santa Barbara, "goes overboard" in a hanging basket.

"San Miguel", a tall vigorous hybrid by Vergil Stark of San Diego, shows off the fuzzy mohair finish on its foliage.

Calendar of Care

Down-to-Earth Gardening for October & November

by Ed Ogden

Rancho Santa Fe Nursery

THE gardening year drawing to a close has been one of peculiar climate and weather in Southern California. An extremely late and cold winter and spring, followed by extended periods of warmer-than-normal weather with high humidity late during the period, has had its effect on gardens in the area. Tropicals got a very late start this season, and in areas subject to frosts the hardening-off process should be followed more carefully than usual by withholding fertilizer and cutting back on irrigation. Mildew on roses, as well as other fungus diseases, is a greater problem than normal and calls for closer attention to spraying and dusting and will necessitate a more thorough clean-up during the dormant season. Fungus diseases of turf appear to be causing more damage than in past years and require heavier curative and preventive applications of fungicides. And red spider and other mites are more active due to these weather variations, calling for sprays with lightweight oils or specific miticides.

On the brighter side, we're in the midst of one of the most rewarding periods of the year for gardeners. Summer and fall annuals and perennials are at their best, our first plantings of winter and spring flowers should already be in the ground, the heavy fall blooming period has rose gardens at their showiest, and foliage plants are showing off lush, heavy new growth from the warm weather.

Bulb planting season is at its height. In addition to the familiar and favorite daffodils, narcissus, freesias, tulips, ranunculus, anemones, hyacinths, watsonias and the like, there is a fairly extensive list of out-of-the-ordinary bulbs most gardeners have seen in nurseries or heard about, but never get around to trying in their gardens. These are proven species for Southern California areas, including those under Colorado River water irrigation, and are rewarding additions to the bulb garden: *Leucocoryne ixioides,* Glory of the Sun, will naturalize in garden situations, adding a welcome note of blue color with clusters of fragrant blossoms on slender stems; Ixias also naturalize, and bring a variety of "hot" colors to sunny areas; Roman hyacinths differ from the common variety in their open flower clusters and longer period of bloom, and come in both blue and white; another superb blue is the Peruvian squill, *Scilla peruviana,* with almost evergreen foliage; Sparaxis brings an effect to the garden related to ixias, also in the "hot" color tones; Arabian Star of Bethlehem, *Ornithogalum arabicum,* produces clusters of white star-like florets in mass, more attractive each year; Leucojums, the Snowflake, is our substitute for the old favorite Lily-of-the-Valley which doesn't grow in our areas; *Allium giganteum,* seen recently as the spectacular in cut-flowers, displays huge spheres of lavender-pink trumpets, and is just as hardy as the other alliums; the deciduous Veltheimia, down in summer and in glorious bloom during winter with warm orange flowers similar to the red hot poker; and *Haemanthus katherinae,* the Blood Lily, except that the tones are more in coral shades. These and other species are available through normal sources of supply, some here and some there — but out of the rare plant category nowadays, and well worth a trial. As always we restate the mandatory requirement for generous quantities of bonemeal in the planting of all bulbs.

With cooler nights and moderate daytime temperatures it's past time for the first planting of stock, snapdragons, calendulas, Iceland poppies and larkspur; and in shady areas cinerarias, the different types of primroses, mimulus, violas and pansies. And many of the year-around annuals and perennials can well be planted now: petunias, scarlet flax, alyssum and lobelia, along with marguerites, agatheas, gerberas, vinca, English violets, statice, the hardier begonias, and carnations and other dianthus.

And it is time for our annual reminder to set out starter plants of perennials for bloom *next* season, to avoid the expense of putting them in next spring from gallon cans or large pots, and also for better performance next year: delphinium, columbine, the several types of Shasta daisies, penstemon, foxglove and Canterbury bells.

The approach of winter calls for certain modifications in gardening

practice, and wise gardeners will take precautions to minimize the effects of cold both in the air and in the soil. In areas subject to frost, tender plants may be grown satisfactorily provided they are hardened off in the fall to go into cold weather less susceptible to damage. Standard techniques are to drastically withhold water and fertilizer both to avoid tender new growth and to toughen existing foliage and wood. In cases where frost damage is not a threat, low soil temperatures can do as much damage to tropicals — these plants have not developed resistance to soil fungi that flourish in cold soils and damage root systems, and then the remaining roots operate at a fraction of normal efficiency in the cold soil. Best practice is to keep our sun-loving subtropicals as dry as possible (wet soil is 20° or more colder than when on the dry side) and to overfertilize to compensate for inefficient root action. Well-established hibiscus, bougainvillea, citrus and related subtropicals thrive on as little irrigation as once in 5 or 6 weeks, depending on soil type, size of root system, and nearness to cooler beach climate.

Another annual precaution: The first couple of showers do little more than water lawn and ground cover areas — several inches are required to penetrate deeply enough to benefit shrubs and other plants with deep root systems. And it is also necessary to continue deep watering of deciduous fruit and shade trees even after they have shed their leaves — although the trees appear to be fully dormant, they maintain a requirement for moisture in the root zone throughout the year. So, until we have received several significant rainfalls, continue a program of deep-watering plants with deep root systems.

One last reminder — in order to have lush poinsettia flowers for the coming holidays, increase feeding and watering as growth tips begin to show color, and watch for evidence of damage by the new mite that has been troubling poinsettias the last few years. If caught in time with a specific miticide large blooms and heavy foliage can be the reward.

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Fuchsias

by Morrison W. Doty

San Diego Fuchsia Society

AUTUMN weather in Southern California may easily lull the Eastern gardener into dangerous neglect of his plants, because of the tendency to expect cool, damp foggy nights to take the place of Fall rains he has known. October in the San Diego area sometimes brings the highest temperatures of the entire year, perhaps with warm, drying winds also, which may damage, or even kill fine container plants that are not protected and watered well every day during such weather. As it has been since the beginning, in an area too arid to have produced coal through the ages, water must be always the very first requisite for all plant life here. For rain-forest natives like our Fuchsias, there must be a constant adequate supply of moisture in the soil. If possible the air about the plants should be kept moist by fogging, especially in hot dry weather. As cool Autumn advances we may reduce the amount of watering and feeding, to induce dormancy for the Winter rest period that older plants need most.

Any plants that have become too tall, perhaps straggly with foliage only at tips, should be cut back to proper shape for their type at this time. Discreet Fall pruning of most Fuchsias is now advocated quite generally and some successful growers claim that Fall pruning is better and plants are safer from die-back, bleeding and frost damage in this area, than is Spring pruning. However after heavy Fall pruning which may stimulate too much lush, tender growth plants can be killed by frosts later. We have observed, that older tired plants seem best prepared for dormancy and should be pruned or shaped only lightly at this time of year. Young vigorous plants may well be cut back sharply to produce a lot of gratifying late bloom, provided their location is well protected, or in one of our so-called frost-free gardens. These really do exist in San Diego it seems. In such places we may, and do have blooming Fuchsias actually the year round. Such plants however need regular care, rather than being allowed to go into early dormancy for Winter.

In pruning Fuchsias, either Fall or Spring, keep always in mind which of the four main types the plant conforms best to, trim into that shape, then pinch tips later to thicken growth, until near blooming time.

1. **Basket plants,** which should always be of a trailing or semi-trailing variety, are to be cut back drastically to perhaps 6 inches of new growth, or near edge of basket—uprights removed —some foliage left.

2. **Bush or shrub type plant.** Pruning for height should depend upon the natural growth habits of each variety, using wild growing tall varieties for background, and low growing types for border or foreground planting. Cutting back to 3 or 4 leaf nodes perhaps, after removing weak or ugly cross growth, should provide plenty of the new growth needed for bloom.

3. **Standard or tree types** must reach the desired height before the tip is touched, then rub off the lower side buds, and encourage the branches around the head to thicken by pinching. Choose upright varieties, naturally.

4. **Espaliers** will take less pruning. Cross branches that spoil the shape you have decided upon, or laterals that have developed excess side growth should be cut back, to avoid diverting strength from the main design.

In our climate, this is a good time to save some choice cuttings from your favorite varieties to propagate new stock. It is so easy to do, for Fuchsia slips will even root pretty well just in a glass of water. Good gardeners select tips of new growth from their most vigorous choice varieties. Cut diagonally with sharp shears not over 3 or 4 inches long, then press the cut end, with lower leaves removed, down firmly past one or more growth nodes, into very moist Monterey sand in a starting flat. They may be dipped in a rooting hormone first, if desired, and if they may not be ready to transplant on time, a moisture-holding nutrient as a little leaf mold is added to sand. Put the starting flat in filtered sunlight, protected from cold winds. This should make the cuttings root well enough to transplant into 2-3 inch pots in about three weeks. Constant

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Irises

by James E. Watkins

President, San Diego-Imperial
Counties Iris Society

WEEDS are sometimes a gardener's best friend. If it were not for weeds most of us probably would never stir up the soil around plants, and this cultivating can be more valuable than fertilizing, — not only breaking up a hard-packed soil, but also rearranging it so its nutrients can reach the plant's root system. If you are a tidy gardener you will rake up the weeds afterwards and compost them. If you are on the lazy side, like myself, you will leave them on the ground between plants, not too close since they can harbor insects, and let them compost where they lie. Don't do this with seed pods on the weeds, since they may yet mature; and spotted spurge, which *Sunset Magazine* calls the worst weed of the decade, bears seed when it first pops from the ground. The moral is, cultivation, (whether in the process of weeding or not) pays big dividends in irises, as in other plants, resulting in bigger increase and healthier growth.

Cultivation does not replace fertilizing though, and if you have reblooming irises, now is the time to apply a light feeding. Reblooming irises need applications of fertilizer oftener than other sorts, simply because blooming takes a lot of strength out of the plant. For other irises wait until November, and then give them all a good feeding with a low-nitrogen fertilizer, something like a 5-10-10 combination. Scratch it into the soil and water in. If the weather remains dry keep the plants moist while growth continues, always being careful to watch your drainage. A side dressing of dairy manure is also beneficial in early winter, being careful that it does not come in contact with the rhizomes.

Another good friend of the gardener is agricultural gypsum. It has a number of uses, the commonest being to incorporate it in fairly copious quantities to break up heavy clay soils. It probably will not change the *pH* of the soil, the degree of alkalinity or acidity, but it is said to reduce the harmful effects of alkalinity, which is always a problem in this area. Iris rot is not so common here as in some other parts of the country, but it does occur, and if you find leaves suddenly flat on the ground, check to see if part of the rhizome has rotted. Unless it is almost gone, you can cut out the rot to hard tissue, perhaps swab it out with straight lysol, let it dry thoroughly, then replant it with gypsum generously packed around the previously infected area. One commercial grower, located in a cold area, recommends that gypsum be applied within iris clumps in late fall or early spring to prevent rot. So a bag of gypsum is a handy thing to have on hand, and it doesn't cost much.

September and October are the months to plant or divide the spuria irises. Before planting incorporate a goodly amount of dairy manure into the soil. The county's largest grower covers his ground with three inches of manure and then digs it in. The bulbous, Japanese, and Louisiana irises are also planted at this time, and most dealers supply directions on planting when they ship. Remember that the Japanese and Louisianas appreciate an acid soil, and it helps to dig in a quantity of peat moss. Domestic "peat" is not the same thing, and often is far more alkaline than the soil you are trying to help.

If you haven't already started your 1966 want list of irises, here is one you should consider if you aren't fortunate enough to have it already. At the time of this writing the Dykes Medal of the American Iris Society had just been awarded the 1965 winner, and it is especially good to report it is given to a good friend in this region of the Society, Neva Sexton of Wasco, California. The iris is *Pacific Panorama,* a tall medium blue, fluted and ruffled. It has won awards from its start, a High Commendation as a seedling in 1959, introduced in 1960, an Honorable Mention in 1961, the Award of Merit in 1963, and runner-up for the Dykes Medal last year. Last year also it was voted the most popular iris in southern California and Arizona. These local symposiums are more important to you than the national ones, since they must inevitably reflect the ones that do well in this area. It had become almost a joke that Dykes Medal winners would not grow in southern California. Some will do well here, and many refuse to bloom or thrive. Last year the iris show had a classification calling for five different Dykes Medal winners.

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moisture underneath only is necessary. Being kept too wet may cause damping off and loss of plants. Good rich leaf mold and light loam is satisfactory in potting small plants, with little or no fertilizing whatever until the plants shall have developed enough strong roots and hardness to accept it.

Besides the sharp water spraying of foliage to discourage pests, at this time of year, preventive mild sprays containing malathion and DDT will protect against insect infestation that may threaten tired end-of-season plants. Remember to put tender young plants in protected places, and to check for moisture every day all container plants during hot Fall days. Contacting groups that promote flowers you love will add a lot of helpful information, interest and enjoyment to your gardening, plus the congenial garden friends, and happy exchanges made possible through this priceless hobby. Join the Fuchsia Society and seek out and plant more of our exotic lilting little dancing Fuchsia varieties, together with lovely ferns. You'll be glad you did.

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with no entries because no one had five in bloom at the time. This year the classification was changed to three, with only one or two entries. So there is reason to rejoice that this year's winner is a sure-fire grower here. I planted one rhizome last year, and had four bloom stalks and five healthy new plants from it. I have not had the same experience with any other Dykes Medal winner. *Pacific Panorama* is a beautiful flower, one you should have in your garden.

Another "type" of iris that had run into trouble here is the so-called "black" irises. Southern California had looked with envy at other parts of the country where the very dark irises seemed at home, where here, if they would grow at all and bloom, they would do so on very short stems. There was *Bibelot,* a naturally low iris, that did well here and was a prodigious increaser. Then came Gordon Plough's *Edenite,* a red-black that bloomed well and came pretty close to its typical 30-inch height, also a good increaser, and still a good iris. That was followed by Walter Luihn's *Dark Fury,* a black-purple, that makes itself right at home here, blooms extremely well, and which cannot help but go down in price more next year because it multiplies so rapidly. Now there is a 1965 introduction by Mr. Luihn. *Night Song,* an improvement and said to be as vigorous. One of my personal favorites is one not so well-known, *Congo Song,* with dark purple standards and black falls edged lighter violet, and with a violet beard. It did exceedingly well this year, and a second year's experience will show how adaptable it is here.

If you have wondered what the two irises are at the west entrance of the County Administration Center, formerly Civic Center, that keep blooming and blooming, the blue is Tom Craig's *Steeplechase,* and the white and yellow combination is Plough's *Flame Kiss,* both choice rebloomers, moderately priced. Two newer ones, both blue and white plicatas that can compete with the best of the once-onlies are *Latest Love* and *Lalitha Mallette.* Another plicata that has rebloomed for me several times a year is *Cayenne Capers,* cream marked with copper brown, very brilliant so that it demands attention. A good red-blend is Craig's *Adam,* exceptionally vigorous.

So things are looking up! A Dykes Medal winner that will grow here, some blacks that do well, and some rebloomers that don't have to be apologized for.

Dahlias

by Larry Sisk

San Diego County Dahlia Society

AFTER the summer shows, the dahlia hobbyist starts planning for next year's gardens. First, he collects and studies lists of the year's winning varieties, because he knows that for exhibition, the way to have winners is to plant those dahlias that have a record of consistently taking awards on the show table.

This year, the list is about the same as last year — and the two to four years before that.

The top winner in San Diego and at the shows throughout California and the world is **First Lady,** a San Diego dahlia, originated by R. Paul Comstock of Solana Beach. It is an eight-inch, formal yellow that folds back to hide the stem. **First Lady** was the best medium dahlia at the San Diego show, and the runnerup to **Lula Pattie** for best in show. It accounted for a total of 10 blue ribbons.

Golden Hearts a flame-colored medium cactus from Holland, was second with eight blues, and **Juanita,** medium dark cactus from South Africa, won seven blues for third. **Rothesay Superb,** four-inch red ball from England and a favorite with arrangers, was fourth with six, and tied for next were two Americans, **Pat N Dee,** five-inch white ball, and **Surprise,** an 11-inch pink cactus.

Other popular dahlias that continued to win included **Florence Chadwick, Lula Pattie,** and the pink miniature, **Hazel Harper,** all of San Diego origin.

Home gardeners who plan to have a few dahlia plants next year, and who might have failed to carry a notebook to the show, will be rewarded by choosing some of the easy-to-grow winners: **Nita,** a variegated sport of **Juanita; Nantenan,** bright yellow cactus; **Ballego's Glory,** formal blend of golden autumn colors; **Grace,** prolific six-inch pink cactus, and **Peach Blend,** prolific and strong-stemmed five-inch peachy pink formal.

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The man of the house should try his luck with **Emory Paul,** currently the largest variety, a formal plum red that grows bigger than 14 inches and has a record for almost 18 inches. Other satisfactory large ones include **Lula Pattie,** white informal; **Kidd's Climax,** pink formal; **Night Editor,** informal purple; **Lavengro,** informal lavender; **Holland Festival,** informal bi-color of orangy-red and white, and the old standby, **Croyden's Masterpiece,** formal autumn of 12 to 14 inches.

The choice show poms include **Master Michael,** orange; **Willo's Violet,** purple; **Little Willo** and **Mrs. J. Telfer,** white, **Crossfield Ebony,** dark red, and **Apropos,** yellow.

In addition to **Hazel Harper,** the best miniatures include **Arabian Knight,** dark red; **Ruby Charm,** red; **Little Mermaid,** white; **Jescot Tangerine,** orange; **Harriet,** purple, and **Gypsy Kiss,** variegated, lavender and white.

During October and November there will be dahlias growing in Southern California Gardens. They will continue to grow and flower until late November if kept free of mildew and if they are watered and fed.

To combat mildew, spraying with captan or phaltan is a good preventive. In gardens susceptible to heavy infestation, karathane or sulphur will give good results.

For dahlia plants that still are green, feeding with fish emulsion or a low-nitrogen liquid formula will be helpful.

If late summer heat has resulted in an invasion by red spiders, the gardener should spray with kelthane, or insecticides containing a heavy percentage of kelthane and malathion.

Dahlia plants that have started to turn brown should be permitted to dry gradually by cutting down on the water. Plants that have ceased to flower may be cut off about six to 12 inches from the ground and the roots permitted to cure. Root digging and storing will be discussed in the December-January issue of CALIFORNIA GARDEN.

Begonias

by Alice M. Clark
A. D. Robinson Begonia Society

Margaret Lee has described the begonias at this season better than I can. "The tall canes and hairy fibrous are dripping with blooms and the large leaved rhizomatous have huge umbrellas of blossoms towering over them. The medium and small leaved rhizomatous are big balls of various shapes, sizes and sheens while the rexes are a fairy carpet of color. The entire effect is one of a wall of glowing, growing color, never being sure where one plant stops and another one begins." Perhaps you are also lucky enough to have some late-blooming tuberous to add their bright color to the picture.

If the above rhapsody impresses you, it is not too late to get "something good going for you" right now. The nice thing is that begonias, like azaleas, can stand moving or transplanting when in full bloom. Start now instead of waiting until spring, if you are using pots or planters. In containers you can be sure of good friable soil that drains well. Begonias do not like to be soggy, and it is hard to control plants in the ground in the rainy season. After transplanting give a weak feeding of acid plant food. Continue to feed other begonias half strength every two weeks until the weather cools when you should fertilize only as long as the plants seem to be growing. When the temperature goes down roots are less active. Ease off with the watering also as there is less evaporation. On the other hand, if there comes a hot dry spell, keep the humidity up by watering the walks and walls but don't flood the begonias. Watch the smooth-leaf canes for mildew, particularly **Lucerna**, which is more susceptible, and be sure the foliage is dry at night. Control mildew with "Doo-Spray." Follow directions.

If the tuberous begonias are following their normal way, the leaves will begin to yellow and the flowers will become single with more seed types. Water and feed as long as the foliage is green, as the tubers will be storing food for next year. After that stage is over, cut down on the water to avoid rotting the tuber. *Don't* cut off the plant stalk. It will fall of its own accord. Brush off the debris from the top of the pot. Set the container under a tree in an upright position, where it will not get bone dry and still will not have too much moisture. If the plants are in the ground, dig and clean up the tubers and keep them where they will not dry out and yet will not mould or rot, a difficult place to find.

Watch the double-flowered bedding begonias if they have been blooming all season. If the stalks get rangy, with few leaves and flowers, break them back to the base or to where new growth is branching out. Cut out dead canes and, if there are few sprouts at the bottom, repot in a smaller container. Very bushy plants smother the new bottom growth which needs light and air to keep it coming. This same treatment will benefit **Richmondensis** which also needs pinching to keep it bushy. As the days get shorter it needs more light to keep its handsome rosy color, but move it gradually to prevent burning.

Get an inspiration from begonias. Don't miss the Tour to the Lowry garden, October 24th.

COMMENDABLE QUOTE—

From Neil Morgan's column in the San Diego *Evening Tribune*.

"Clean-up Star: One thing in San Diego that's been noticed by the White House is the landscaping in front of Dick Archibald's auto wrecking yard. He has a note from Lady Bird Johnson thanking him for helping to keep America beautiful."

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Roses

HYBRID TEAS (THE C.E.G. ROSES)

by Carl Truby
President, San Diego Rose Society

ABOUT 1867 a new group of roses was born in France to be known as the Hybrid Teas. M. Marc Guillot, a French hybridizer, is considered by many to be the most successful of the early developers and growers. Many of the crosses made in the late 1800's are still marketed; some are finding renewed popularity in today's gardens, especially in Europe.

New Hybrid Teas appear on the market at the rate of about fifty a year and over 6,000 are registered to date. Of the 6,000 registered I should like to talk about 30 which I feel are the very best for cutting, exhibiting and growing in our area.

First and perhaps the area where most gain has been made in the past few years are the whites. **Matterhorn** and **Jack Frost** have been grown and are growing very well here. They show great promise for cutting and exhibiting in the future. **Kings Ransom** and **Golden Scepter** are excellent yellow roses which have very good form and are somewhat more resistant to disease than others. Another yellow which has a beautiful bud and long straight stems is **Eclipse. Mister Lincoln** is the best red rose to be introduced in many years and will certainly be popular for many years to come. Having won the All American Rose Selection award for 1965 (AARS) this rose offers just about everything. First it is a good growing bush, the blooms are produced on long straight stems and the flower is a beautiful shade of red with an abundance of fragance. The bloom does not fade in the hot sunlight and will last very well as a cut flower. Other good reds are **Chrysler Imperial, Oklahoma** and **Christian Dior. Chrysler Imperial** is a pollen parent of both **Mister Linclon** and **Oklahoma.**

In the Light Red and Deep Pink colors we have two fairly new comers; **Fragrance** and **Prima Ballerina.**

Each of these roses have good exhibition type blooms which could win blue ribbons in any show. **Fragrance** is the result of a cross between **Charlotte Armstrong,** and **Merry Widow** but leans heavy toward the **Charlotte Armstrong** side. **Prima Ballerina** has an interesting history, having been hybridized in Russia in 1955. The Russian name is **Solistka Baleta. Royal Highness** and **First Love** are two very good light pink roses. Both of these roses are good growers and produce many beautiful exhibition type blooms.

Duet, Columbus Queen and **Eiffel Tower** could be called the prolific three. Each one produces many blooms each year and does so continuously. The bushes are tall with dark green glossy foliage. **Duet** was awarded the AARS in 1961 — however **Columbus Queen** and **Eiffel Tower** seem to win the most blue ribbons in this area.

Next we have a large category of rose colors known as blends. We have apricot blend, orange blend, orange red, pink blend, red blend and yellow blend. Listed below are my 14 favorite blends and why. All grow well in Southern California and all are disease resistant.

Angel Wings	Well balanced bush
Granada	Beautiful blooms
Helen Traubel	Unusual blooms
Lady Elgin	Vigorous bush
Mojave	Loves fall weather
Invitation	Pleasant fragrance
Mme. Henri Guillot	Outstanding foliage
Peace	Most popular present day rose
Saturnia	Beautiful pointed bud
Sutters Gold	Free summer blooming
Swarthmore	Good show rose
Thanksgiving	Good grower
Tropicana	Unusual color
Tiffany	Strong stems

We hope you find your favorite among these thirty varieties, if not, then I should have picked forty.

Hybrid Teas are the most important of all roses. Probably 75 percent of all roses produced commercially for garden use and 100 percent of all grown commercially for cut flowers are hybrid teas. The largest section of any Rose Show will be that of the Hybrid Teas. More often than not the Queen of the Show will be a Hybrid Tea and almost always one of the thirty mentioned above.

Your garden probably has more Hybrid Teas than any other type. Since 1960 seventeen roses have been awarded the All American Rose Selection, of these nine have been Hybrid Teas. The honors and awards go on and only the names change.

If as much rose progress is made in the next 20 years as has been made since 1945 then we are sure to see the most beautiful, disease resistant fragrant roses, imaginable: Until then I'm sure we will be happy with **Mister Lincoln, Granada, Swarthmore** and **Thanksgiving.**

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Camellias

by Josephine A. Crowder

San Diego Camellia Society

For the next few months the Sasanqua camellia has the spotlight. This type has many uses, especially for ground covers, espaliers, baskets and low hedges. The small close-coupled foliage on shining willowy branches makes the Sasanqua popular for arrangements, but the flowers, mostly singles, last only a day.

This would be a fine time to invest in several plants of the **Yuletide**, with bright orange-red flowers, introduced by Nuccio Nursery. It bears a long time, the flowers hold well, and it plays up the holiday color. Those who visited the Miller garden in El Cajon last year will recall the camellias, **Briar Rose**, aptly named for its flower shape, and **Yae-arare**, a large single white, both well used as ground covers. Others are **Showa-Supreme**, a deep clear pink, heavy and vigorous; **White Doves** and **White Frills**, both vigorous and low; **Pale Moonlight**, orchid pink; **Pink Snow**, light pink anemone, and **Showa-no-sakae**, slow-growing light pink. The Millers also raise the single pink, **Hugh Evans**, as a low hedge. De France recommends the bushy, deep rose **Tanya** for a low shrub or hedge. Try some of these camellias in hanging baskets where the charm of the flowers and shining foliage can be better seen.

If not done earlier, disbud the Japonicas right away. When planning for show display allow one bud on a two-foot stem of the medium and large varieties and select one that points downward, to prevent rain or dust damage or petal bleach. If just garden color is the aim, save one large and one small bud to the cluster. Be sure to twist them off and do not disturb the pointed growth bud at the end.

Keep the buds coming with copious even watering unless the rains take over. If there is a sudden dry spell, build up the humidity so that the outer bud petals do not dry out, causing "balling." Always watch for aphids and chievers. Most of the spraying early in the season should give unblemished leaves now as a background for the beautiful blooms soon to come.

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FEROCACTUS

DESERT BARREL CACTUS

Third in a Series on the Native Cacti of San Diego County

by R. Mitchel Beauchamp

THE large, single columnar form of the Desert Barrel Cactus is the most easily recognized of the native cacti of San Diego County. It is, perhaps, one of the best examples of a survival mechanism which almost all cacti share in common. That mechanism pertains to water storage.

A critical investigation of the Desert Barrel Cactus, or *Ferocactus acanthodes* as it is more precisely called, will reveal a well-armed plant with a body of continuous, vertical ribs. During a drought these ribs are narrow and widely separated. Quite the contrary is true after a large rainfall. The entire root structure of *F. acanthodes* is located near the ground level and immediately absorbs all available water. To contain this large volume of vital water, the cactus, with its accommodating ribs, swells like an accordion; whence the increased volume necessary for survival through the storage of the desert's rarest commodity, water.

With this knowledge of the water storing capabilities of this cactus some persons have tried to procure this stored water from the cactus, but in doing so have mutilated or uprooted the plant; thus leaving it in a condition that will result in the plant's death or the termination of all vertical growth. The only moisture in the plant is in the form of plant juices which are not very palatable and not so plentiful as one would believe from the size of the plant.

The common method of getting to the moist plant pulp is to sever the top of the cactus, which is the main area of growth. As one walks through an area where this procedure has been tried there is seen a curious sight. Around the top edge of the decapitated plant form buds or plantlets which will continue to grow upward in a manner to give the effect of natural branching by the plant which is normally, almost without exception, a single, unbranched plant.

The size of *F. acanthodes* averages approximately five feet in height at maturity, but plants over that size do occur in our county and further southward into Baja California. The estimated age of a five foot specimen is given to be about one hundred fifty years. The immature cactus is globular and, like some other barrel cacti, does not appear to be related to its columnar "big brother." Another interesting feature of *F. acanthodes* is its tremendous color variation.

The variation within a given taxonomic group of organisms can be quite striking; the human race being the prime example. Also, with the plant kingdom there are tremendous variations within a species. To be more specific, *F. acanthodes* has a large range in both spine color and spine form. Taxonomists have placed some of the extremes of these ranges into separate varieties, forms and even species. One of these ambiguous species is *Ferocactus rostii* which is said to have a different flower than *F. acanthodes* in addition to its spines being straw-colored and appressed or growing flat against the plant body.

For those interested in seeing *F. acanthodes,* I can suggest several locations. Perhaps the most viewed stand of these cacti is that located in In-ko-pah Gorge through which Interstate 8 now ascends and descends on its two separate roadways. Another area is on Highway 78 as it passes through Sentenac Canyon and thence to Ocotillo. The largest growth of *F. acanthodes* that occurs in this county is located within Anza-Borrego State Park where they are protected by strict laws.

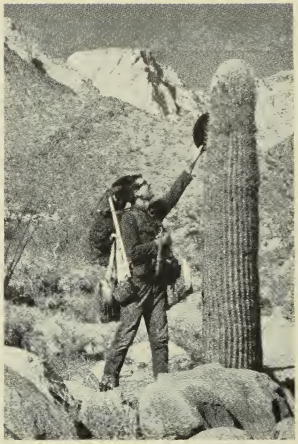

Photo by Mackintosh

The author attempts to touch the top of a very large Desert Barrel Cactus discovered in Tajo-Cantilles Canyon area of Baja California.

SUCCULENTS OF THE LILY FAMILY

by Burr Clouette

San Diego Cactus and Succulent Society

ONE of the commonest succulents in any collection is the Aloe. These are often showy plants found wherever succulents are grown, especially in outdoor gardens. Many are large and spreading and fairly hardy. Some Aloes are small and best grown as pot plants. Of late some of these smaller ones have been placed in a separate genus.

However there are a number of genera in the Lily family that are ideal pot plants and show up to better advantage in containers. Some of the succulent Liliaceae (excluding the genus Aloe) that I have grown as pot plants belong to the genera Apicra, Bulbine, Gasteria and Haworthia.

Apicras are few in number and only differ from Haworthia in flower structure. The plant bodies are similiar, a leafy rosette usually stemless. The culture of Apicras, and most of these South Africanders is the same as for Haworthia. Apicras are few in number and only differ from Haworthia in flower structure. The plant bodies are similiar. The only Apicra I have grown is *A. pentagona.* It is a twisted more-or-less five-sided rosette of horny pointed leaves, some three to five inches tall. It has small pinkish-white tubular flowers, which are symmetrical and only slightly spreading at the tips. *Haworthias* have irregular somewhat tubular flowers which appear two-lipped.

When grown in pots, *Gasteria bowieana volubilis* is a greenish ball, sitting on top of the soil. It is stemless when dormant, and at such times should be watered very little or not at all. When growth starts, water and fertilize regularly. Plant in a gritty porous mix, with its lower quarter in soil. Two shoots are sent up when growth starts. These shoots twine and clamber up and over each other forming a mass of short leafless branches. The small green flowers are born on this twiggy mass which is really an inflorescence. The bulb gradually increases in size and will eventually split into two or more parts.

Bulbine caulescens is a stemmed plant a foot or so tall. The smooth succulent pale green leaves are arranged in rows or tiers on opposite sides of the ends of the branches, similiar to Gasteria. The leaves are narrow and about three inches long. The flowers are yellow and Aloe-like. Other *Bulbines* form rosettes. All are easily grown in a porous sand mix.

Gasterias are stemless plants with leaves mostly arranged in two opposite tiers, one on top of the other. With age, many of them form rosettes. The leaves of most Gasterias are marked or mottled cream or tan. Some have raised markings. G. armstrongii with its plain dark green recurved leaves is the only exception that I know of. Most have fleshy leaves one-half to one inch wide, bluntly rounded, two to eight inches long. However, the one I grew, had leaves over a foot long, an inch or more thick and a couple of inches wide, tapering from base to bluntly rounded tip. This large Gasteria formed a spiral rosette with age. Most Gasterias, Apicras, Haworthias offset and also grow from leaf cuttings, as do Aloes.

The Haworthias are by far the most numerous, there being some two hundred named varieties. Most are just sub-species or forms. *H. reinwardtii* alone has a dozen or more different forms. The Haworthias come in many shapes, sizes and types. Most are nearly stemless rosettes with a variety of leaf form, texture, color and markings. The arrangement of the leaves on the stem, or in the rosettes, takes many patterns. Sometimes though they seem to be placed just hit or miss.

The horny leaved Haworthias are usually dark green and/or silvered, plain or textured, long pointed, short triangular or some combination of these characteristics. *H. radula* and *H. augustafolia* have long pointed rough textured but unmarked leaves. The leaves of *H. fasciata* are similiar but with cross bands of white tubercles. In *H. attenuata* the tubercles are hit and miss. A few have a stem covered with various types of leaves. They are rather triangular, fleshy and spirally-arranged in *H. tortuoso. H. viscosa* is a small, short four-sided column of thin triangular leaves.

One group of Haworthias are window plants with fleshy leaves with transparent areas to allow light to enter the leaf. *H. cuspidata, H. pilifera* and others in this group have pale green fleshy leaves with windows in the tips. Two of the most interesting of the windowed group are *H. truncata* and *H. Maughani.* In these the dark green fleshy leaves appear to be cut off crosswise at the greatest diameter. The leaf ends are transparent. Other Haworthias as *H. setoso, H. Colusii, H. arachnoides* and *H. minima* have toothed or hairy edges and tips and seem to be covered with cobwebs.

All of these plants of South African origin make excellent container specimens. A mix of 1/3 good soil, 1/3 sand and 1/3 screened leaf mold is excellent. Place drainage material in the bottom of the pot, then the mixture. Grow in a warm spot but shaded from the hottest midday sun. Many make more perfect specimens when grown in light broken shade, as under lath or saran shade cloth. A Cygon dip and the use of sterile soil and/or a soil fumigant or fungicide will keep plants pest free and disease free. Moderate watering (less in cold damp weather) and an occasional watering with a complete liquid fertilizer, will make stronger growth.

All of the above mentioned plants are interesting, worthwhile, nearly trouble-free plants and are worth growing. Do not expect flowers of any beauty, — just interesting form, texture, pattern and markings. These are enough.

Good reference works are; *Succulents for the Amateur* by Scott E. Haselton. *Succulent Plants* by H. Jacobsen. These and many others are available from the Abbey Garden Press, Pasadena, California.

SOIL PROBLEMS - -

The Gardener's Challenge

by E. Robert Bichowsky

EVERYONE who gardens, whether it be at home or in a park or on a golf course has experienced the difficulties of preparing soil and later keeping it in condition.

First of all, we should realize the function of soil. It must provide anchorage for the roots, moisture, oxygen and act as an exchange medium for plant nutrients.

Our job is to make certain that the soil provides all of the above conditions. A sandy soil is the easiest type to prepare and maintain and little needs to be said except that liberal water and fertilizer are needed. Peat moss or other organic conditioners can be added to help retain water. The majority of soils contain clay particles.

The limiting factor to growth besides moisture and nutrients is oxygen. This oxygen or air must be maintained at approximately 20 to 25 percent or else plant roots die. When soil is originally rototilled or spaded up we break up the clods and leave it in an open condition where air is abundant. Once the soil is watered a few times it packs and settles and usually loses more and more of the air spaces. As this condition continues the soil becomes compacted and the air space supply is so low that root death is inevitable. This problem is most extreme where we plant trees, shrubs, ground covers and lawns because we can't open up the soil at intervals as we do when we plant flowers or vegetables every few months.

Now, what can we do to overcome this problem. First of all we must incorporate enough long lasting organic material into the soil to keep it from packing and thus insure an adequate amount of air spaces. In the past we used amendments such as steer manure, peat, leaf mold and redwood and these materials work well but unfortunately they are decomposed by bacterial action in the soil. Steer and leaf mold will last about 6 months while peat and redwood will last about 2 to 3 years. Once these materials are decomposed there is nothing to keep the soil from packing and losing its proper proportion of air spaces.

A relatively new development has come along that has revolutionized the soil amendment field. This is the product called Loamite Soil Amendment. This material is manufactured by coating Douglas Fir sawdust with sulfuric acid, cooking it for a few minutes in a closed burner at 2100°, and finally neutralizing it with Anhydrous ammonia. This process burns off the cellulose part of the organic matter — leaving only the lignin phase. This lignin that is left is not decomposed by bacterial action in the soil—thus the use of Loamite insures extremely long lasting organic matter. Loamite has been in soil areas for 13 years and the loss has been measured at 10 percent. Thus it is not unreasonable to believe that it can be expected to last 20 years or longer.

The use of Loamite insures a stable form of organic matter that will keep the soil particles apart and thus allow proper aeration of the soil.

In planting trees and shrubs the planting hole should be made one and a half times as deep as the plant ball and twice as wide. The soil that has been removed should be blended with 20 percent of this Loamite (4 shovelfuls of soil to 1 shovelful of Loamite) and then used around the plant in the hole. The balance of the soil will make a basin for easy watering. Plants that are planted in this manner will grow properly because of the proper ratio of soil to air and moisture.

Lawns and ground cover soil should be rototilled to a minimum of six inches and Loamite should be blended into the top 4 inches at the rate of one bag per 100 sq. ft. This will insure 10 percent of long lasting organic matter within the root zones.

Flowers and vegetable soils can be treated in the same manner.

Results over the past several years have shown that proper soil preparation pays dividends. By paying attention to these needs one can maintain a soil condition that will permit deep and long lived root systems. Only by providing conditions for a strong root system can we expect a plant to thrive —a condition similar to building on a strong foundation.

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SAN DIEGO FLORAL ASSOCIATION

FLORAL BUILDING, BALBOA PARK

(Under the sponsorship of
The Park and Recreation Dept., City of San Diego)

Third Tuesday, Floral Building, 8 p.m.
Pres. Mrs. Emmet W. Fowler 454-1795
8497 La Jolla Shores Dr., La Jolla

FLOWER ARRANGERS' GUILD OF SAN DIEGO
First Thursday, Floral Building, 7:30 p.m.
Pres.: Mrs. John Casale 465-0997
9372 Loren Drive, La Mesa 92042

AFFILIATE MEMBERS 1955

ALFRED D. ROBINSON BEGONIA SOCIETY
Third Friday, Homes of Members, 10 a.m.
Pres.: Mrs. Clayton Lee 296-4845
3911 St. James Pl., S.D. 3
Rep. Dir.: Mrs. Anuta Lynch 298-1400
202 Lewis, S.D. 3

CIVIC CENTER GARDEN CLUB
Meets every Thursday, 12m to 1 p.m.
Garden House, Grape and 101 Civic Center
Pres.: James Saraceno 274-2628
3366 Lloyd St., S.D. 17
Rep.: Betty Elias 415-3385
8121 Hudson Drive., S.D. 19

GENERAL DYNAMICS GARDEN CLUB
First Wednesday, Floral Building, 7:30 p.m.
Pres.: Danny Blum 582-2983
4730 Baylor Dr., S.D. 15
Rep. Dir.: J. E. Henderson 274-1754
3503 Yosemite, S.D. 9

MEN'S GARDEN CLUB OF SAN DIEGO CO.
Fourth Monday, Floral Bldg., 7:30 p.m.
Pres.: Ellsworth A. O'Bleness 223-0833
4636 Niagara St., S.D. 7
Rep.: Dr. J. W. Troxell 282-9131
4950 Canterbury Drive, S.D. 16

MISSION GARDEN CLUB
Meets First Monday, 8 p.m.
Barbour Hall, Pershing and University
Pres.: Grace E. Brown 466-5638
7865 Quince St., La Mesa
Rep.: Julia Bohe 282-7422
3145 No. Mt. View Dr., S.D. 16

ORGANIC GARDENING CLUB
Third Friday, Floral Building, 7:30 p.m.
Pres. Ferd I. Thebus 277-6897
4511 Mt. Gaywas Dr., S.D. 17
Rep.: Mrs. Hermine Hilkowitz 296-2282
1756 Mission Cliffs Dr., S.D. 16

POINT LOMA GARDEN CLUB
First Friday, Silver Gate Savings & Loan Bldg., Ocean Beach, 10:00 a.m.
Pres.: Mrs. Marshall Randall 453-4630
3166 Carnegie Place, La Jolla
Rep.: Mrs. Jack White 222-1344
1019 Cordova, S.D. 7

SAN DIEGO CACTUS & SUCCULENT SOCIETY
First Saturday, Floral Building, 2 p.m.
Pres.: William H. Nelson 298-3349
4253 Maryland St., S.D. 3
Rep.: Dr. Ralph Roberts 273-9085
2202 Wilbur St., S.D. 9

SAN DIEGO CAMELLIA SOCIETY
Second Friday, Floral Building, 7:30 p.m.
Pres.: Mr. Ray Greer 469-8970
3956 Kenwood Dr., Spring Valley
Rep.: Mrs. Lester Crowder 295-5871
3130 Second St., S.D. 3

SD-IMPERIAL COUNTIES IRIS SOCIETY
Meets 3rd Sunday, Floral Bldg., 2:30 p.m.
Pres.: James E. Watkins 728-7337
2925 Los Alisos Dr., Fallbrook
Rep.: Mrs. N. R. Carrington 453-3383
6283 Buisson St., S.D. 22

S.D. CHAPTER CALIF. ASS'N NURSERYMEN
Second and Fourth Thursday, 7:30 p.m.
Pres.: John Basney 273-4636
4731 Conrad Ave., S.D. 17
Rep.: John Basney 273-4636
4731 Conrad Ave., S.D. 17

SAN DIEGO COUNTY DAHLIA SOCIETY
Fourth Tuesday, Floral Building, 7:30 p.m.
Pres.: Victor Kerley 224-1884
3765 James St., S.D. 6
Rep.: Mrs. R. M. Middleton 296-3246

SAN DIEGO COUNTY ORCHID SOCIETY
First Tuesday, Floral Building, 8 p.m.
Pres.: Ralph Ameele 273-1084
3160 Chicago St., S.D.
Rep.: Byron H. Geer 222-2044
3370 Talbot St., S.D. 6

SAN DIEGO FUCHSIA SOCIETY
Second Monday, Floral Building, 8 p.m.
Pres.: Mrs. Charles Williams 224-5227
1094 Devonshire, S.D. 7
Rep.: Mrs. Walter Bunker 281-5027
4721 Bancroft, S.D.

SAN DIEGO ROSE SOCIETY
Third Monday, Floral Building, 8 p.m.
Pres.: Carl F. Truby 422-3350
1035 Monserate Ave., Chula Vista
Rep.: Mrs. Felix White 264-4440
5282 Imperial Ave., S.D. 14

SOUTHWESTERN GROUP, JUDGES' COUNCIL CALIFORNIA GARDEN CLUBS, INC.
First Wednesday, Floral Building, 10:30 a.m.
Chairman: Mrs. C. W. Benson 274-1626
3640 Crown Point Dr., S.D. 17

OTHER GARDEN CLUBS

AMERICAN BEGONIA SOCIETY
San Diego Branch
Fourth Monday, Barbour Hall, University & Pershing, 8 p.m.
Pres.: Mrs. Leah Jones 284-2514
3734 40th St., S.D. 5
San Miguel Branch
First Wednesday, Youth Center, Lemon Grove, 7:30 p.m.
Pres.: Mrs. J. W. Lowry 463-4762
7452 Roosevelt, Lemon Grove

BEAUTIFUL BERNARDO GARDEN CLUB
First Wednesday, 1:30 Seven Oaks Community Center, Bernardo Oaks Dr.
Pres.: Fred W. Walters 748-1486
12048 Callado Dr., S.D. 28

CARLSBAD GARDEN CLUB
First Friday, VFW Hall, Carlsbad, 1:30 p.m.
Pres.: Mrs. Wanda Bond
VFW Hall, Pio Pico & Oak St., Carlsbad

CHULA VISTA FUCHSIA SOCIETY
Second Tuesday, Norman Park Recreation Center, 7:30 p.m.
Pres.: Mr. August H. Goerke 420-3930
481 Flower, Chula Vista

CHULA VISTA GARDEN CLUB
Meets Third Wednesday, 1:30 p.m.
C.V. Woman's Club Bldg., 357 G St., C.V.
Pres.: Mrs. John A. Rector 422-2583
266 Whitney, Chula Vista 92010

CLAIREMONT GARDEN CLUB
Meets Third Tuesday, 9:30 a.m.
Place announced at each meeting.
Pres.: Mrs. Stanley Fletcher 276-2520
3090 Chicago St., S.D. 17

CORONADO FLORAL ASSOCIATION
Meets Third Wednesday, 8 p.m.
Christ Church Parish Hall, Coronado
Pres.: Capt. Harry Sosnowski, U.S. Navy (Ret.) 435-4280
1124 Glorietta Blvd., Coronado 92118

CROSS-TOWN GARDEN CLUB
Third Monday, Barbour Hall, University & Pershing, 8 p.m.
Pres.: Charles Williams 284-2317
4240 46th, S.D. 15

CROWN GARDEN CLUB OF CORONADO
Fourth Thursday, Red Cross Bldg., 1113 Adella Lane, 9:30 a.m.
Pres.: Mrs. George Kunberger 435-4691
101 Ocean Drive, Coronado 92118

DELCADIA GARDEN CLUB
First Wednesday, Encinitas Union Elementary School, 7:30 p.m.
Pres.: Mrs. Edwin C. Pickett 753-3890
1068 Devonshire, Encinitas

DOS VALLES GARDEN CLUB (PAUMA VLY.)
Second Tuesday, Members Homes, 1:30 p.m.
Pres.: Mrs. G. F. Shearer 745-9114
P.O. Box 371, Valley Center

ESCONDIDO GARDEN CLUB
Third Friday, Women's Club House, 1:30 p.m.
Pres.: Mrs. Ralph D. Goldsmith 745-3013
Rte. 3, Box 275, Escondido 92025

FALLBROOK GARDEN CLUB
Last Thursday, Fallbrook Woman's Clubhouse, 1:30 p.m.
Pres.: Mrs. Tom John 728-7423

GROSSMONT CENTER GARDEN CLUB
Second Monday, Orange Tree Rm. Auditorium—10 a.m.
Pres.: Mrs. Lowell E. Elson 469-8009
3451 Calavo Dr., Spring Valley 92077

HIPS AND THORNS (Old Fashioned Roses)
Meets three times yearly.
Pres.: Roy C. Lawton 422-1775
719 First Ave., C.V.

IMPERIAL BEACH GARDEN CLUB
2nd Tuesday, So. Bay Com. Center, 1:30 p.m.
Pres.: Mrs. Alice Loomis 424-7235
874 Fourth, Imperial Beach 92032

LAKESIDE GARDEN CLUB
2nd Monday, Lakeside Farm School, 7:30 p.m.
Pres.: Mrs. Louis Griffin 448-4199
12024 Lakeside Ave., Lakeside 92040

LA MESA WOMAN'S CLUB (Garden Sec.)
3rd Thursday, La Mesa Woman's Club, 1:45 p.m.
Pres.: Mrs. Harry K. Ford 583-4320
4851 Lorraine Dr., S.D. 92115

LEMON GROVE WOMAN'S CLUB
(Garden Section)
First Tuesday, Lemon Grove Woman's Club House, 1 p.m.
Pres.: Mrs. Gladys Short
8124 Alton, Lemon Grove

NATIONAL CITY GARDEN CLUB
Third Wednesday, National City Community Bldg., 7:30 p.m.
Pres.: Ray W. Daniels 282-0370
2462 Tuberose St., S.D. 5

NORTH COUNTY SHADE PLANT CLUB
Second Sat., 1:00 p.m. Seacoast Hall, Encinitas
Pres.: H. Marshall Chadwell 755-9219
R. 1 Box M32, Del Mar

O. C. IT GROW GARDEN CLUB
Second Wednesday, S. Oceanside School Auditorium, 7:30 p.m.
Pres.: Mrs. J. A. Johnson 722-2792
Rosicrucian Fellowship
P.O. Box 713, Oceanside

PACIFIC BEACH GARDEN CLUB
Meet second Monday, 7:30 p.m. Community Club House, Gresham and Diamond Sts., Pacific Beach
Pres.: Mrs. Raymond P. Smith 488-0830
4975 Fanuel, Pacific Beach 92109

PALOMAR CACTUS & SUCCULENT SOCIETY
Third Saturday, 1 p.m. Palomar College Foreign Language Building, Room F22
Pres.: Mrs. Charles R. Shafer 729-4815
2172 Chestnut, Carlsbad

POWAY VALLEY GARDEN CLUB
2nd Wednesday, 9:30 a.m., Community Church
Pres.: Mrs. Donald Weston 748-3487
13835 Terrilee Dr., Poway 92064

RANCHO SANTA FE GARDEN CLUB
Second Tuesday—Club House, 2:00 p.m.
Pres.: Mrs. John E. Grimm 756-1106
P.O. Box 241, Rancho Santa Fe 92067

SAN CARLOS GARDEN CLUB
Fourth Tuesday, Homes of Members, 1 p.m.
Pres.: Mrs. Al Sally 286-1973
5721 Breton Wy., S.D.

SAN DIEGO BROMELIAD SOCIETY
Second Monday, 7:30 p.m. Meets at home of president.
Pres.: Mrs. Cleoves Hardin 469-3038
9295 Harness Rd., Spring Valley

SAN DIEGUITO GARDEN CLUB
Third Wednesday, Seacoast Savings Building, Encinitas, 10 a.m.
Pres.: Mrs. Waldo Vogt 755-4772
773 Barbara Ave., Solana Beach

SANTA MARIA VALLEY GARDEN CLUB
Second Monday, Ramona Women's Club House, 5th and Main, 9:30 a.m.
Pres.: Mrs. William Robinson 789-1987
Third & H Sts., Ramona 92065

SPRINGHOUSE GARDEN CLUB
Third Thursday, Porter Hall, Univ. & La Mesa, 7:30 p.m.
Pres.: Mr. R. M. Frodahl 469-1933
3852 Avocado, La Mesa

SWEETWATER JUNIOR GARDEN CLUB
First Monday, 7:30 p.m. Meets at home of Temporary President
Temp. Pres.: Cleoves Hardin 469-3038
9195 Harness Rd., Spring Valley

VISTA GARDEN CLUB
First Friday, Vista Rec. Center, 1:00 p.m.
Pres.: Mrs. W. L. Larsen 726-3622
320 Mar Vista Dr., Vista, 92083

VISTA MESA GARDEN CLUB
Second Tuesday, 2 p.m. Family Association Center
Pres.: Mrs. Clara Haskins 465-0910

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